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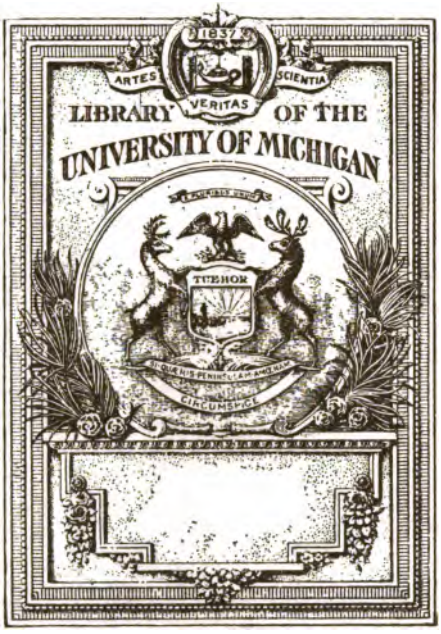
REPORT
OF
METROPOLITAN PARK COMMISSION

1918



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REPORT

OF THE

BOARD OF METROPOLITAN PARK COMMISSIONERS

DECEMBER, 1918

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OFFICERS.

COMMISSIONERS.

WILLIAM B. DE LAS CASAS, *Chairman.*

EDWIN U. CURTIS.

EVERETT C. BENTON.

ELLERTON P. WHITNEY.

CHARLES J. BARTON.

SECRETARY.

GEORGE LYMAN ROGERS.

ASSISTANT SECRETARY.

WILLIAM H. GOWELL.

ENGINEER.

JOHN R. RABLIN.

OFFICES, 18 Tremont Street, Boston, Mass.

The Commonwealth of Massachusetts.

REPORT.

The Metropolitan Park Commission presents herewith its twenty-sixth annual report.

Conditions arising out of the shadow of war in Europe and our country's participation in it have very naturally limited the extent and scope of the work of this Board during the past year and confined it in large measure to the care of the property already acquired and to protecting it and facilitating its use by the public. At all points the effect of enlistments and changes in the personnel of the office and the working forces, and the increased cost and scarcity of materials, have been felt. The service flag of the Board bears seventy-seven stars to indicate the number of enlistments from its forces, and besides these there have been many others attracted by better remuneration or opportunities to other employments. Yet, on the whole, the year has been one of satisfactory results, and it is a pleasure to acknowledge the generally helpful spirit of co-operation of those remaining to carry on the work under adverse conditions. The police force was seriously affected by enlistment and other changes, and by difficulty in filling vacant places. It is a further cause of congratulation that the Army and Navy authorities have lent sympathetic assistance to this branch of the service both by requiring an observance by those in the service of civil laws and rules and regulations, and by detailing military police and provost guards for duty at Revere and Nantasket beaches and at Charles River Basin whenever circumstances made the policing somewhat greater than the depleted Metropolitan Park Police Force could provide with a reasonable margin of safety. The best of spirit has generally prevailed between the several co-operating forces.

One important acquirement of land made during the year is worthy of special mention, — that of the "Round-House Property," so called, of the Boston and Albany Railroad at the junction of Commonwealth Avenue and Essex Street in the city of Boston. This acquirement was authorized by chapter 299 of the General Acts of 1917, and is most important because it preserves opportunity for a connection between the most ample and attractive avenue of the city and the park holdings along the southerly bank of Charles River, and the possibility of a direct and beautiful pleasure way from the very heart of the city to Soldiers Field, the Speedway and the western parts of the Metropolitan Parks District. But two stretches of river front remain to be acquired to make this opportunity complete for all time. These are the frontages of the Brookline Gas Company, property which is not at this time in active use, and of the abattoir at Brighton. Both of these frontages may be acquired in a way which will not limit the usefulness of the rest of the properties for business purposes.

Construction work in extension of park facilities has been limited and beset by many difficulties because of war conditions, especially felt in scarcity of labor, high cost and scarcity of material. The most important has been that of completing a bridge over Neponset River, to provide temporarily for travel of all kinds until construction of a new permanent bridge, to replace the wooden structure known as Neponset Bridge, between Neponset Avenue in the Dorchester district of Boston and Hancock Street in Quincy. The old bridge was narrow, with only one car track and a draw so close to the Boston side as to interfere with navigation, and it had reached the limit of safety. The temporary bridge was planned before the war began to provide the same accommodation as the old bridge until the new bridge was built, and for economy's sake it was planned to use the draw from the old bridge. At the request of the United States Shipping Board, however, and in large measure at its expense, the plan was changed so as to provide a width sufficient to carry two car tracks, and to avoid interruption of travel by a new steel draw located in the line of the new channel nearer the middle of the river, thereby leaving the old bridge in use until the new bridge was completed. These

changes caused delay, and the difficulty of obtaining labor and supplies caused further delay. The temporary bridge was opened to travel, however, on Oct. 28, 1918. The total appropriation made for the cost of the temporary and permanent bridges by chapter 300 of the General Acts of 1915 and chapter 220 of the General Acts of 1917 was $450,000. The cost of the temporary bridge was increased by the increased cost of labor and materials, by the requirements of the United States government, and by a decision of the Attorney-General that the cost of continuing the water service of the city of Boston must be assumed as part of the cost of the bridge. The cost of the temporary bridge, as charged to the appropriations, has been $120,000. The balance of the appropriations available for completion of the permanent bridge is, therefore, $330,000, but the estimated cost of the permanent bridge in the simplest form of a reinforced concrete girder or arch bridge of the width of 60 feet, as originally planned for, is now estimated as likely to cost $400,000. By chapter 11 of the Resolves of 1918 this Board has been directed to review the whole matter of construction of this bridge with a view to any further recommendation which may seem necessary, and full details will be found in that special report. It seems worthy of mention, however, that the conclusion of the Board in that report will be that the 60 foot width of bridge originally contemplated will be sufficient to provide for only one line of vehicles moving on each side of two lines of cars, and will be insufficient to provide for the combined travel which in the near future must be provided for by this bridge. In the opinion of this Board this bridge and its approaches should be built to a width of 70 feet, so as to provide for two lines of vehicles on each side of two lines of cars in the center of the bridge. The increased cost of a bridge and approaches 70 feet wide over one of 60 feet is estimated at $100,000, and the deficiency in the appropriation, as above stated, to provide for the width of 60 feet originally contemplated is $70,000. This Board will not feel justified in beginning construction of the permanent bridge until these matters are further determined, and now recommends an appropriation of $170,000 in addition to the balance now available to provide the total appropriation necessary for making the permanent bridge and approaches 70 feet in width.

Construction of the driveway in extension of Mystic River driveway has been extended under somewhat adverse conditions along the southerly side of Mystic Lake as part of a project authorized by a special appropriation under chapter 188 of the Special Acts of 1915 and chapter 186 of the Special Acts of 1916. The land for this driveway, including the entire southerly end of Mystic Lake, was a gift. The purpose of the driveway is to provide a continuous way for pleasure travel connecting the driveway along Mystic River with a State highway now being completed along the high lands of the north side of Arlington, which will provide an improved line of travel to Lowell and to Lexington, Concord and other parts of the State. The State highway will be completed early in 1919. The driveway being built by this Board may be completed to a degree which will warrant its being opened for travel at a further estimated cost of $10,000. The Board believes that public convenience and good faith require provision for the immediate completion of this driveway to the extent indicated, and therefore recommends the appropriation necessary for this purpose.

In contrast with the unexpected cost and delay in the work upon Neponset Bridge and the Mystic driveway, it is a pleasure to record continuance of the filling for the subgrade of Old Colony Parkway at a cost less than could be otherwise obtained by purchase of filling in place of ashes and house waste from the Boston Development and Sanitary Company. It is expected that the filling will continue during the present year, and will provide subgrading of all but the approaches to the bridge to be built between Savin Hill and Harrison Square.

Less noteworthy or important construction work, in the form of repairs, renewals and changes to meet new conditions of use, has been accomplished at many points. Of these, only the ones which indicate the general policy of the continuation of work through several years require mention.

The Riverside Recreation Grounds and buildings at Riverside, Newton, on upper Charles River, were accepted as a gift in 1914. The policy of the Board in caring for this property has been to make it available for use by the public with the fewest possible changes until public use had sufficiently indicated the direction in which it could be made most useful. It

has now become apparent, however, that the use of the grounds and buildings is tending to increase in the direction of occasional use of all the facilities of the property for large parties for picnics and outings, and in daily use from early spring to late autumn by individuals and smaller parties to whom the boat and canoe storage facilities, the tennis courts, bowling alleys, swimming pool and lunch facilities are attractive. This use now promises to be permanent and increasing, and it therefore has become apparent that, in addition to the repairs necessary for the preservation of the property, a certain amount of improvement alterations must be made gradually and as part of a policy to be continued through several years. The improvements begun during the past year are in the direction of a renewal and rearrangement of the electric lighting system, required both for safety and for convenience, and economy in distribution of the cost among the several lessees, and a relocation and rebuilding of the pumping plant of the swimming pool to provide for proper cleaning and change of water. These improvements will be continued during 1919. The policy adopted in regard to this property is practically the same as that which has been pursued with success at Nantasket Beach, where, in connection with the acquirement of the beach, the Board came into possession of a large number of buildings, of which it preserved those most likely to be of use and has been gradually repairing and altering them in a way to make a consistent group of buildings and walks along the water front adapted to public convenience and use. A great improvement and a greatly increased public use of the Reservation have resulted. During the past year a new main sewer has been constructed for use of the buildings on the water front, plank walks have been replaced by solid fill behind concrete walls, and other improvements and repairs following a permanent and consistent policy have been accomplished.

Dredging required by the Charles River Basin Act, to maintain a stated depth of Broad and Lechmere canals, has involved not only removal of silt but also at one point of pieces of granite fallen from near-by walls which are gradually being undermined. The cost of keeping these canals clear of obstructions is likely to increase until such time as adequate provision

of law requires that they be protected by walls or close piling. These canals are private property, over which the Board has no control, and there seems to be no sound reason why the tax payers should dredge them and keep them clear of ice unless an adequate control over them is given which will enable the Board to require abutting properties to be maintained in proper condition.

Along Revere Beach Drive and Revere Beach Parkway concrete walks have been laid for a distance of 3,200 feet. These walks are in the form of narrow strips and are undoubtedly a great convenience. It seems to be advisable to continue this work from year to year at the expense of public funds so that the sidewalks along the parkways and other main pleasure ways may be maintained at something like the standard of such walks in the near-by city and town highways. Last year the Board presented a bill to the Legislature intended to provide for such sidewalks upon terms of assessment of a percentage of their cost upon the abutters, as is customary in the adjoining municipality, but this act failed. In 1917 a special act authorized granolithic sidewalks on Middlesex Fells Parkway opposite Broadway Park, but the abutters have been unwilling to assume any part of the cost, and the Board did not feel that conditions at this point warranted the building of granolithic sidewalks wholly at the expense of the District. The need for better sidewalks at many other places is great, and the Board will feel that it must build them gradually as its funds will permit. It would be better, however, if there were a general sidewalk law authorizing assessment of a part of the cost on abutting owners so that the work might proceed more rapidly.

The lighting of the parkways by the Welsbach system of naphtha lamps has deteriorated, and is unsatisfactory and inferior to electric lighting upon the better public ways of the cities and towns of the District. It has been especially unsatisfactory during the past two years, and, though this may in some measure be attributed to war conditions, yet the Board is of the opinion that unless a very marked improvement takes place, it will be desirable to substitute an underground conduit electric lighting system as soon as possible. The Board has authority to make ten-year contracts for electric lighting, but

owing to war conditions the electric light companies have been prohibited from making extensions of their lines. It is hoped that this prohibition will be soon removed.

In spite of adverse war conditions and consequent difficulty in obtaining labor, the woods and river bank reservations have been well cared for and much improvement work carried on. In Blue Hills the gypsy moth has been kept in check. Much improvement cutting has been done chiefly of sprout growth and chestnut trees, which here as elsewhere in the country seem to be doomed by the chestnut blight, against which no effective remedy has yet been found. One hundred and fifty thousand pine seedlings have been planted this year, making a total of pine seedlings to date of approximately 1,500,000. Of these, a large percentage have lived, and some are now trees 8 feet high. There is good reason for confidence that within a few years the rather monotonous tree growth of the Reservation will be greatly improved by cutting and enriched by the pine plantations. In Middlesex Fells many berry-bearing shrubs have been set out for the sake of enriching the shrubbery of the Reservation and of providing food for birds in winter. All the shrubs used in the reservations and parkways are supplied from the nursery at this Reservation, and it may be added that this nursery now furnishes a better stock at lower cost than can be obtained in the private nurseries. All playground appliances have been removed from the Sheep Pasture and from the watershed of the Winchester reservoirs to the smaller and less open section between the watershed of these reservoirs and that of Spot Pond Reservoir. The location to which these appliances have been removed is off the watershed of any of the reservoirs which supply drinking water to the District, and the change was deemed advisable to avoid the appearance of inviting use of the watershed of the reservoirs by great numbers of people, and the consequent thought of acts which might be a pollution. The change was made at the request of the Winchester Water and Sewer Board and by advice of the State Department of Health. It is greatly regretted because it is the only portion of the Reservation where a large playfield is available, and is, therefore, a serious diminution of the public opportunity for enjoyment and use of the Reservation. It had come into a

large use for picnics and outings, and the very evident eagerness of the public who took advantage of the convenience and attractiveness of this region, and the many inquiries which the Board cannot satisfy for similar convenience elsewhere, leads the Board to hope that it may be possible to provide some other convenient and adaptable playground by additional acquirements within the range of reasonable transportation charges. Beaver Brook Reservation is constantly used for this purpose, but is too small for general use. Blue Hills has only one small open area with open field, and the Riverside Recreation Grounds are so far from Boston as to make the cost of reaching them a limitation. Other open spaces are lacking in near-by groves and the joy of rural surroundings. At the time of the change in use of the Sheep Pasture Playground appliances, it was deemed advisable to terminate the care by this Board as part of the Middlesex Fells of the lands and waters of the town of Winchester used for its water supply.

In all the reservations available open land has been cultivated partly by assignments of plots to private use as war gardens, and partly by cultivation by the forces of the reservations. The result has been very satisfactory both in crops and in improvement of the lands with a view to making them permanent hay fields to produce the hay consumed in the reservations.

Except as above stated, the Board makes no recommendations at this time for appropriations for extension of acquirements or construction work. It may be suggested, however, that if there should arise in the near future necessity for resuming public work as an aid to the return of the man power of the Commonwealth from war service to that of civilian occupation, many pieces of construction work in building of parkways and of needed buildings for which the land has already been acquired in previous years may be entered upon with great advantage. Such work might include the driveway and shore protection from Revere Beach to Winthrop, the West Roxbury and Dedham parkways, the driveway along Charles River from Gerry's Landing to Arsenal Street, and the southwest Border Road of Middlesex Fells, connecting Middlesex Fells and Mystic Valley parkways, and service sheds at Revere Beach, Middlesex Fells and Blue Hills. Old Colony Parkway may

also be considered, but in view of the favorable terms under which construction of subgrade is now proceeding, it seems unnecessary to hurry further construction.

War conditions have greatly increased the cost of living and led to increase in cost of labor and salaries. The adoption of a State standard limiting increase in clerical salaries has prevented reasonable increases, however, in the clerical branches of service, and caused much difficulty in retaining efficient clerks and in replacing those who have left the service of the Board. It is hoped that this will be rearranged by action of the coming Legislature, and at this time it is worthy of attention that the salaries of the engineering employees are limited in the same way, so that it not infrequently happens that the engineering assistant responsible for work in the field receives less pay than the foreman or even the laborers on the work, who have no serious responsibility for its accuracy or honesty of performance. It may also be added that the salaries of the higher officers employed by the Board, and those of the Board, are the same as those in the years when the cost of living began to rise, and are therefore only about one-half in purchasing power of what they were at the time when they were established. Consideration of all these matters by the Legislature is suggested.

Within the past few years consideration has been given by the Legislature to suggestions for an enlarged State constabulary or police, and incident to this consideration there have been suggestions that the Metropolitan Park Police should be made auxiliary to, or subject to call for service by, the State police. This Board has uniformly and consistently objected to these suggestions, not from any disinclination to render assistance whenever requested by the Governor, as of one distinct force to another in case of special and serious emergency, but from the very firm belief that the necessity of public protection and the nature and necessity of the public protection in the use of the Metropolitan parks and reservations require that the force used by the Metropolitan Park Commission should be trained directly by this Board specifically for the work to be performed, and in all but special emergencies engaged solely in its performance. It is deemed essential that the park police should at all times have in mind the thought and habits which

will give confidence to the public to look to them for protection, assistance and information in the use of the reservations and parkways as places of safe and rational recreation, and the experience and observation of the Board lead them to believe very firmly that this requires a different training and influence from that which is deemed essential in the training of the usual police force for the detection and following up of crime and violence, and dealing with the vicious of many elements of a city population. It is sincerely hoped that this distinction may be recognized and that no further thought will be given to diverting the Metropolitan Park Police to a divided authority and training except when required by the Governor.

All of which is respectfully submitted.

WILLIAM B. DE LAS CASAS,
EDWIN U. CURTIS,
ELLERTON P. WHITNEY,
EVERETT C. BENTON,
CHARLES J. BARTON,
Metropolitan Park Commission.

DECEMBER, 1918.

Hon.

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REPORT OF THE SECRETARY.

Hon. WILLIAM B. DE LAS CASAS, *Chairman, Metropolitan Park Commission.*

SIR: — I submit herewith the annual report of the Secretary for the year ending Nov. 30, 1918.

1. ACQUIREMENT OF LANDS.

The following takings of land have been made: —

1. About 36,734 square feet from the Boston and Albany Railroad Company at the corner of Commonwealth Avenue and Essex Street, Boston, under authority of chapter 299 of the General Acts of 1917. This taking provides an entrance from Commonwealth Avenue to land controlled by the Commission in Boston on the south bank of the Charles River.

2. A narrow strip along the banks of Mystic River westerly of South Street Court, Medford, to provide a better approach to the Reservation and give an opportunity to improve the appearance of a point in the Reservation particularly obtrusive from other parts of the Reservation.

3. A small lot on the bank of Mystic River in Arlington, formerly the location of a pumping station, appurtenant to the Rawson estate.

There are about 27 claims pending for takings of land made within two years. The claims will probably require about $75,000 to discharge. Of these claims, 23 are in suit.

2. GENERAL ADMINISTRATION AND SUPERINTENDENCE.

Owing to war conditions, the points in the routine work of administration the past year suggesting particular notice are naturally very limited.

Revere Beach Division.

The Revere Beach Bath-house was opened permanently June 15, and closed permanently September 8. The total number of

bathers was 167,766, of whom 94,697 were male and 73,069 female bathers. The gross receipts were $35,259.95. On July 28 the bath-house was used by 10,011 bathers, the largest number using the bath-house in any one day since it was built.

At Nahant Beach the bath-house was opened permanently on June 29 and closed September 2. The total number of bathers was 42,506, of whom 22,831 were male and 19,675 female bathers. The total receipts were $8,675.10.

A certain amount of money was given in the maintenance appropriations of this year for the construction of sidewalks, Revere Beach Reservation, north of Revere Street, and during the year a total length of 3,202 feet of walk has been reconstructed with concrete surface. A special item of maintenance was also furnished for the repair of the sea wall at Lynn and Winthrop Shore reservations, and this work has been done.

Charles River Division, Lower Basin.

The following sporting events took place on the Basin during the year: —

May 1. Huntington School and Technology class rowing races.
May 4. Harvard class rowing races.
May 9. Rowing races.
May 10. Brown and Nichols school rowing races.
May 11. Phillips Exeter and Brown rowing races.
May 16. Boston College and Brown and Nichols rowing races.
May 18. Technology and Greenough and Noble rowing races.
May 21. Brown and Nichols and Cambridge Latin rowing races.
Brown and Nichols and Worcester Latin High rowing races.
May 24. Brown and Nichols and Huntington rowing races.
May 25. Harvard rowing regatta.
May 29. Interscholastic Rowing Association, rowing regatta.
May 31. Interscholastic Rowing Association, rowing regatta.
June 1. Greenough and Noble and Exeter rowing races.
June 29. United States Navy water carnival, rowing and swimming events.
July 4. New England Amateur Rowing Association, regatta.
City of Boston swimming races.
July 20. American Red Cross Life Saving Corps, swimming exhibition.
August 17. City of Boston swimming races.
August 24. Boston American annual girls' swimming regatta.
September 2. New England Amateur Rowing Association, rowing regatta.

Charles River Upper, Middlesex Fells and Blue Hills Divisions.

In Charles River Upper, Middlesex Fells and Blue Hills divisions 896 bushels of corn and 333 bushels of oats were grown, and in Middlesex Fells Division 937 bushels of carrots. These carrots will supply feed for the animals in Middlesex Fells Division and leave 475 bushels for feed of animals in the other divisions. The corn raised in these divisions has been distributed among the divisions for feed of horses.

Nantasket Beach Division.

The bath-house was opened June 29 and closed September 2. There were 37,773 male and 35,097 female bathers, making a total of 72,870 altogether. The gross receipts were $15,452.85.

Band Concerts, 1918.

Revere Beach (afternoons and evenings of every day except Mondays, beginning June 30 to and including Labor Day),	112
Nahant Beach (Friday afternoons and evenings, July 5, 12, 19, 26, August 2, 9, 16, 23, 30; Sunday afternoons, July 21, August 4, 18),	20
Nantasket Beach (afternoons and evenings of every day except Mondays, beginning June 30 to and including Labor Day),	112
Weston Bridge,	3
Foot of Great Blue Hill,	6
Fellsmere Park, Malden,	3
Sheepfold, Middlesex Fells,	7
Manchester Field, Winchester,	3
Broadway Park, Somerville,	4
West Somerville Playground,	2
Speedway, Brighton,	4
Charles River Road, Watertown,	2
Fox Island, Waltham,	2
Riverside Recreation Grounds,	6
Chelsea Playground,	3
Boston Embankment,	5
Ell Pond Park, Melrose,	3
Quincy Shore Reservation,	3
Furnace Brook Parkway,	2
Mystic Valley Parkway,	2
Wakefield,	3
Woburn Parkway,	3
Winthrop Shore Reservation,	2
Lowell Memorial Park,	3
Beaver Brook Reservation,	2
Total,	318

3. Finances.

Detailed statements of the receipts and expenditures the past year will be found in the "Financial Statement."

Loan Appropriations.

The appropriations heretofore made in the form of loans, with accretions thereto, are as follows: —

Metropolitan Parks Loan Fund.

Original appropriation, chapter 407, Acts of 1893,	$1,000,000 00
General appropriation, chapter 483, Acts of 1894,	500,000 00
Charles River Act, chapter 509, Acts of 1894,	300,000 00
General appropriation, chapter 305, Acts of 1895,	500,000 00
General appropriation, chapter 466, Acts of 1896,	1,000,000 00
General appropriation, chapter 464, Acts of 1897,	500,000 00
General appropriation, chapter 530, Acts of 1898,	1,000,000 00
Revere Beach Bath-house Act, chapter 142, Acts of 1899,	125,000 00
General appropriation, chapter 406, Acts of 1899,	300,000 00
Charles River Improvement Act, chapter 465, Acts of 1900,	50,000 00
Fuller's Wharf Act, chapter 467, Acts of 1900,	30,000 00
General appropriation, chapter 445, Acts of 1901,	450,000 00
Mystic River Bridge Act, chapter 492, Acts of 1901,	200,000 00
General appropriation, chapter 290, Acts of 1903,	125,000 00
Newton Upper Falls Bridge Act, chapter 391, Acts of 1903,	40,000 00
Continuing appropriation, chapter 429, Acts of 1903,	1,500,000 00
Nahant Beach Bath-house Act; chapter 326, Acts of 1904,	70,000 00
Reimbursing loan for moth expense, chapter 486, Acts of 1906,	50,000 00
Purification of Mystic River, Alewife Brook and adjacent water-courses, ponds and drainage areas, chapter 529, Acts of 1906,	100,000 00
Additional appropriation for purification of Mystic River, etc., chapter 529, Acts of 1907,	25,000 00
Mystic River and Winthrop Shore Act, chapter 652, Acts of 1908,	70,000 00
Charles River Land Act, chapter 628, Acts of 1910, and chapter 439, Acts of 1911,	99,554 95
Alewife Brook Purification Act, chapter 458, Acts of 1911,	15,000 00
Work for unemployed, chapter 4, General Acts of 1915,	50,000 00
Weston Bridge Act, chapter 368, Special Acts of 1915,	50,000 00
	$8,149,554 95
To provide for interest and sinking fund requirements to 1900, chapter 311, Acts of 1897,	900,000 00
Total amount of loans,	$9,049,554 95
Amounts received from sales of buildings, receipts from bath-houses, fines, etc.,	198,942 81
Total,	$9,248,497 76

METROPOLITAN PARKS LOAN FUND, SERIES II.

Original boulevard, chapter 288, Acts of 1894,	$500,000 00
General appropriation, chapter 472, Acts of 1896,	500,000 00
General appropriation, chapter 521, Acts of 1897,	1,000,000 00
Saugus Bridge Act, chapter 547, Acts of 1898,	100,000 00
General appropriation, chapter 428, Acts of 1899,	500,000 00
Mattapan Bridge Act, chapter 443, Acts of 1900,	75,000 00
Winchester Act, chapter 444, Acts of 1900,	50,000 00
Revere Beach Parkway Act, chapter 445, Acts of 1900,	200,000 00
General appropriation, chapter 172, Acts of 1902,	450,000 00
General appropriation, chapter 359, Acts of 1903,	110,000 00
Continuing appropriation, chapter 419, Acts of 1903,	1,500,000 00
Alewife Brook and Fresh Pond Parkway Act, chapter 651, Acts of 1908,	50,000 00
Continuing appropriation, chapter 699, Acts of 1912,	1,000,000 00
Wellington Bridge Act, chapter 794, Acts of 1914,	115,000 00
Work for unemployed, chapter 5, Special Acts of 1915,	50,000 00
Alewife Brook Parkway construction, chapter 243, General Acts of 1915,	35,000 00
Neponset Bridge Act, chapter 300, General Acts of 1915,	350,000 00
Wellington Bridge Act, chapter 178, General Acts of 1916,	11,000 00
Improvement of lands in Arlington, chapter 186, General Acts of 1916,	20,000 00
Parkway connecting Blue Hills Reservation and Granite Street, Braintree, chapter 235, General Acts of 1916,	10,000 00
Construction of Dedham Parkway, chapter 237, General Acts of 1916,	10,000 00
Additional appropriation for Neponset Bridge construction, chapter 220, General Acts of 1917,	100,000 00
Settlement of claims for land, Furnace Brook Parkway, chapter 316, General Acts of 1917,	8,000 00
	$6,744,000 00
To provide for interest and sinking fund requirements to 1900, chapter 311, Acts of 1917,	100,000 00
Total amount of loans,	$6,844,000 00
Receipt from sales, etc.,	29,914 16
Total,	$6,873,914 16

NANTASKET BEACH LOAN.

Appropriation, chapter 464, Acts of 1899,	$600,000 00
Appropriation, chapter 456, Acts of 1901,	100,000 00
Total amount of loans,	$700,000 00
Receipts from rents, etc.,	5,881 50
Total,	$705,881 50

CHARLES RIVER BASIN LOAN.

Bonds issued for 1904,	$250,000 00
Bonds issued for 1905,	400,000 00
Bonds issued for 1906,	600,000 00
Bonds issued for 1907,	1,150,000 00
Bonds issued for 1908,	400,000 00
Bonds issued for 1909,	850,000 00
Bonds issued for 1910,	475,000 00
Bonds issued for 1911,	300,000 00
Appropriation, chapter 539, Acts of 1913,	40,000 00
Driveway, Brooks Street to Charlesbank Road, chapter 188, General Acts of 1915,	35,000 00
Total amount of bonds,	$4,500,000 00
Receipts added to loan,	9,368 91
Total,	$4,509,368 91

Expenditures from Loans.

The following tables show the total amount expended in each of the foregoing loans, the total cost of each reservation and parkway to Dec. 1, 1918, and the amount charged by the Auditor's department to meet the sinking fund and interest requirements previous to Jan. 1, 1900. The item of "Miscellaneous" in these tables includes cost of construction of roads, buildings and of all other work of construction, and all other charges against these loans except those for land, general expenses, sinking fund and cost of maintenance required by law to be charged to loans up to 1897. The total charges for maintenance to 1897, general expenses and sinking fund are given separately at the end of the tables. The total amounts charged to those loans are as follows: —

METROPOLITAN PARKS LOAN FUND.

Land,	$5,392,798 66
Miscellaneous, including construction of roads, buildings, etc.,	3,394,831 79
General expense,	163,371 12
Maintenance to Jan. 1, 1897, sinking fund assessments to Jan. 1, 1900, and interest,	290,326 56
Transfer to Serial Bond Loan,	3,601 10
	$9,244,929 23

METROPOLITAN PARKS LOAN FUND, SERIES II.

Land,	$2,258,544 66
Miscellaneous, including construction of roads, buildings, etc.,	3,895,879 47
General expense,	107,090 19
Sinking fund assessments to Jan. 1, 1900, and one-half interest,	59,195 89
	$6,320,710 21

NANTASKET BEACH LOAN.

Land,	$603,329 57
Miscellaneous, including construction of buildings, etc.,	102,551 93
	$705,881 50

The amounts expended from these loans for the fiscal year ending Nov. 30, 1918, are stated in tables in the financial statement.

METROPOLITAN PARKS LOAN FUND.

Blue Hills Reservation: —		
Land,	$363,357 29	
Miscellaneous,	307,058 66	
		$670,415 95
Middlesex Fells Reservation: —		
Land,	$691,162 69	
Miscellaneous,	294,557 47	
		985,720 16
Revere Beach Reservation: —		
Land,	$1,162,947 67	
Miscellaneous,	800,999 04	
		1,963,946 71
Stony Brook Reservation: —		
Land,	$281,243 87	
Miscellaneous,	76,810 67	
		358,054 54

Beaver Brook Reservation: —		
Land,	$29,819 29	
Miscellaneous,	24,437 35	
		$54,256 64
Hemlock Gorge Reservation: —		
Land,	$53,254 00	
Miscellaneous,	15,543 94	
		68,797 94
Charles River Reservation: —		
Land,	$1,569,391 51	
Miscellaneous,	340,471 43	
		1,909,862 94
Neponset River Reservation: —		
Land,	$233,473 04	
Miscellaneous,	46,418 97	
		279,892 01
Mystic River Reservation: —		
Land,	$242,883 21	
Miscellaneous,	380,815 51	
		623,698 72
Lynn Shore Reservation: —		
Land,	$361,199 29	
Miscellaneous,	243,580 01	
		604,779 30
Quincy Shore Reservation: —		
Land,	$73,726 26	
Miscellaneous,	198,160 63	
		271,886 89
Winthrop Shore Reservation: —		
Land,	$51,067 32	
Miscellaneous,	170,560 99	
		221,628 31
Hart's Hill Reservation: —		
Land,	$10,000 00	
Miscellaneous,	202. 35	
		10,202 35
King's Beach Reservation: —		
Land,	$24,297 21	
Miscellaneous,	1,551 63	
		25,848 84
West Roxbury Parkway: —		
Land,	$244,976 01	
Miscellaneous,	8,313 67	
		253,289 68

Wellington Bridge: —		
Miscellaneous,	$185,317 42	
		$185,317 42
Nahant Beach Bath-house: —		
Miscellaneous,	$67,794 58	
		67,794 58
Boylston Street Bridge: —		
Miscellaneous,	$45,838 57	
		45,838 57
Alewife Brook Purification: —		
Miscellaneous,	$136,398 90	
		136,398 90
Weston Bridge: —		
Miscellaneous,	$50,000 00	
		50,000 00
General expense,		163,371 12
		$8,951,001 57
Sinking fund requirements to 1896,	$18,980 18	
Care and maintenance to July 1, 1896,	85,813 46	
Care and maintenance, July 1, 1896, to Jan. 1, 1897,	19,604 06	
Sinking fund assessment for 1897,	63,630 70	
Sinking fund assessment for 1898,	9,755 55	
Sinking fund assessment for 1899,	64,224 00	
Interest,	28,318 61	
Transfer to Serial Bond Loan (unexpended balance Alewife Brook purification appriation),	3,601 10	
		293,927 66
Total charged to Dec. 1, 1918,		$9,244,929 23
Balance Dec. 1, 1918,		3,568 53
		$9,248,497 76

METROPOLITAN PARKS LOAN FUND, SERIES II.

Blue Hills Parkway: —		
Land,	$133,505 02	
Miscellaneous,	269,513 47	
		$403,018 49
Middlesex Fells Parkway: —		
Land,	$263,687 60	
Miscellaneous,	613,667 39	
		877,354 99
Mystic Valley Parkway: —		
Land,	$203,990 91	
Miscellaneous,	423,840 01	
		627,830 92

Revere Beach Parkway: —		
Land,	$537,445 51	
Miscellaneous,	869,565 65	
		$1,407,011 16
Neponset River Parkway: —		
Land,	$83,941 75	
Miscellaneous,	36,100 54	
		120,042 29
Fresh Pond Parkway: —		
Land,	$44,086 25	
Miscellaneous,	31,635 58	
		75,721 83
Furnace Brook Parkway: —		
Land,	$173,897 77	
Miscellaneous,	239,884 59	
		413,782 36
Nahant Beach Parkway: —		
Land,	$80,940 78	
Miscellaneous,	76,014 13	
		156,954 91
Lynn Fells Parkway: —		
Land,	$40,468 46	
Miscellaneous,	126,373 84	
		166,842 30
Winthrop Parkway: —		
Land,	$132,915 73	
Miscellaneous,	54,523 38	
		187,439 11
Alewife Brook Parkway: —		
Land,	$144,497 74	
Miscellaneous,	45,705 13	
		190,202 87
Charles River Speedway: —		
Miscellaneous,	$521,348 66	
		521,348 66
Blue Hills roads: —		
Miscellaneous,	$8,742 06	
		8,742 06
Middlesex Fells roads: —		
Miscellaneous,	$61,483 68	
		61,483 68
Stony Brook roads: —		
Miscellaneous,	$37,183 45	
		37,183 45

Lynnway: —		
Land,	$20,500 00	
Miscellaneous,	124,368 29	
		$144,868 29
Spy Pond Parkway: —		
Miscellaneous,	$89 04	
		89 04
Old Colony Parkway: —		
Land,	$282,590 53	
Miscellaneous,	51,926 98	
		334,517 51
Woburn Parkway: —		
Land,	$3,958 75	
Miscellaneous,	52,038 32	
		55,997 07
Dedham Parkway: —		
Land,	$10,527 01	
Miscellaneous,	22,552 42	
		33,079 43
Hammond Pond Parkway: —		
Land,	$94,965 85	
Miscellaneous,	5,061 45	
		100,027 30
Quannapowitt Parkway: —		
Land,	$6,625 00	
Miscellaneous,	1,831 82	
		8,456 82
West Roxbury Parkway: —		
Miscellaneous,	$199 42	
		199 42
Vose's Grove: —		
Miscellaneous,	$980 08	
		980 08
Wellington Bridge: —		
Miscellaneous,	$120,796 40	
		120,796 40
Neponset Bridge: —		
Miscellaneous,	$95,028 72	
		95,028 72
Arlington Parkway: —		
Miscellaneous,	$4,035 12	
		4,035 12

West Street, Braintree: —		
Miscellaneous,	$1,389 85	
		$1,389 85
General expense,		107,090 19
		$6,261,514 32
Sinking fund requirements for 1896,	$3,650 03	
Sinking fund requirements for 1897,	14,057 10	
Sinking fund requirements for 1898,	3,765 08	
Sinking fund requirements for 1899,	15,396 00	
One-half interest,	22,327 68	
		59,195 89
Total charged to Dec. 1, 1918,		$6,320,710 21
Balance Dec. 1, 1918,		558,203 95
		$6,878,914 16

NANTASKET BEACH LOAN.

Land,	$603,329 57
Miscellaneous,	102,551 93
Total charged to Dec. 1, 1918,	$705,881 50

CHARLES RIVER BASIN LOAN.

Expended from beginning of work to Dec. 1, 1918,	$4,469,933 63

The above amount has been distributed as follows: —

Administration,	$108,060 16
Dam,	1,118,772 60
Lock,	724,142 64
Temporary bridge and approaches,	184,895 36
Drawbridge,	100,371 06
Highway,	55,557 85
Dredging, pile-driving and protection work in Basin,	179,881 35
Broad Canal,	117,251 64
Lechmere Canal,	53,388 87
Boston Embankment,	895,213 92
Boston Marginal Conduit,	635,511 96
Cambridge Marginal Conduit,	99,472 48
Elimination of malarial mosquitoes,	1,173 68
Landing piers,	7,667 99
Float anchorage,	23 90

Police signal system,	$9,847 56	
Improvement of south bank and driveway,	31,506 09	
Service sheds,	19,198 95	
Mortuary,	1,560 66	
Otter Street widening,	34,762 82	
Landing near Faneuil Station,	1,057 83	
Alterations and improvements in stable and stable yard,	2,052 15	
Shelters,	1,672 00	
Rent of land,	1 00	
Maintenance,	88,708 51	
		$4,471,753 03

Respectfully submitted,

GEO. LYMAN ROGERS,
Secretary.

DEC. 1, 1918.

REPORT OF THE ENGINEER.

Hon. William B. de las Casas, *Chairman, Metropolitan Park Commission.*

Sir: — I submit herewith the report of the Engineer for the year ending Nov. 30, 1918, as follows: —

The number of men employed in the Engineering Department, which had been reduced to 20 at the end of last year, was further diminished during this year by the resignation of 12 more to enter the service or to accept employment in war work. Four men have been appointed to fill some of these vacancies, but it has been difficult to find enough men willing to accept these positions, at the salary offered, to maintain a properly balanced organization. For this reason the department has been somewhat handicapped in speedily performing the work required of it, but as little new construction work has been in progress, and the requirements have been chiefly in connection with maintenance and preliminary work, it has been possible to arrange to meet them without serious delays. It seems probable that there will be little difficulty in obtaining assistants for the next year's work as applications are already being filed.

Mary C. Godvin, chief clerk in this department since its organization in 1896, died on June 4, 1918. She has constantly rendered faithful and efficient service to the Commonwealth during her twenty-two years of employment.

The principal pieces of construction work done under the direction of the department have been the completion of the temporary bridge over the Neponset River, the filling and grading of Mystic Valley Parkway Extension along the southerly shore of Lower Mystic Lake from Medford Street to Mystic Street, Arlington, and the filling of sections of Old Colony Parkway with ashes and rubbish collected in the near-by district by city of Boston contractors.

The services of the Engineering Department have been furnished for the direction and supervision of the work for the care and operation of the locks and drawbridges under the control of this Commission, and for the work of maintenance, repairs and resurfacing of roadways.

The cost of conducting the department has been as follows: —

Engineering: —		
Construction: —		
Services,	$9,806 16	
Expenses,	421 87	
		$10,228 03
Maintenance: —		
Services,	$16,842 62	
Expenses,	2,352 88	
		19,195 50
Total,		$29,423 53

Details of the work done under the direction of this department are given in the following sections and in the tables appended.

Parkways.

Alewife Brook Parkway.

Extensive repairs have been made to the Hill Road Bridge over Alewife Brook Channel by the rebuilding of practically the entire floor, at a cost of $762.08.

Considerable damage was done to the roadway surface and concrete edgestone and sidewalk by fire which destroyed the Boston Elevated car barn adjacent to the Parkway. This damage was repaired at a cost of $915.28.

The removal of these car barns gives an opportunity to acquire additional land for the Parkway at this point, which was considerably restricted at the time of construction on account of the excessive cost of taking this property. A plan has been prepared and negotiations begun with the company to acquire a small triangular parcel.

A section of the roadway from Mystic Valley Parkway to the Somerville Playground has been resurfaced with bituminous macadam by the forces of the Middlesex Fells Division. This

part of the Parkway, which was formerly Powder House Boulevard, was transferred to this Commission by the city of Somerville.

Plans and estimates for underdrainage and edgestone in the section near the Somerville Playground at the junction with Powder House Boulevard have been made and a portion of the work completed.

Middlesex Fells Parkway.

A section of the easterly roadway from the southerly end of Wellington Bridge to the end of the concrete road constructed by the Massachusetts Highway Commission on Middlesex Avenue has been resurfaced with Portland cement concrete. This section of the road is subject to considerable heavy traffic, both by motor and horse-drawn vehicles, and in the past has been difficult to maintain in good condition. The easterly or traffic roadway north from Wellington Bridge to the junction of Middlesex Avenue is also difficult to maintain with a bituminous surface on account of the excess of heavy traffic, and I recommend that in the near future this section be surfaced with Portland cement concrete.

Estimates have been prepared and lines and grades given for the construction of a Wright wire fence 6 feet high about the grounds in the vicinity of the Somerville Bath-house.

Mystic Valley Parkway.

Additional work has been done for the filling and grading of Mystic Valley Parkway Extension from High Street to Mystic Street, Arlington, along the southerly side of Lower Mystic Lake. For this work about 16,000 cubic yards of filling material were obtained from the Arlington Cemetery adjacent to the Parkway, which material was given to this Board free of cost by the trustees. There were 3,500 cubic yards obtained from our own property adjacent to the cemetery, and 2,055 cubic yards from the land of Annie M. Easte in Arlington. The amount of filling material required for this work was considerably increased over the preliminary estimates on account of excessive settlement in the swamp. Studies have been made for a change of line opposite the portion in which the greatest

settlement occurred, which can be accomplished by taking a narrow strip of back land belonging to the heirs of Augustus E. Scott. The value of the land is not great, and considerable expense of filling will be saved.

Slight changes have been made at the proposed entrance to Mystic Street to conform to the entrance of the State highway on the opposite side. These changes necessitated the acquirement of a small piece of land belonging to the town of Arlington.

A plan has been prepared for the conveyance of land to the town of Arlington for widening of Medford Street.

The section of roadway between Winthrop Street and Main Street, Medford, has been resurfaced with bituminous macadam. The work was done by the forces of the Middlesex Fells Division.

Studies are being made and data collected for report to the Legislature on control of the shores of Mystic Lakes.

Old Colony Parkway.

Neponset Bridge. — On account of delays in obtaining materials for the construction of the temporary Neponset Bridge, work could not be completed by the first of the year as had been anticipated, and work was practically suspended during the winter months. At about the time the work was resumed in the spring to complete the temporary bridge, representatives of the United States Shipping Board Emergency Fleet Corporation conferred with this Board regarding widening the temporary bridge so as to provide for the location of two electric street railway tracks instead of one as provided by our plans and as existed on the old bridge. The object of this widening was to facilitate the handling of large numbers of men employed at the Fore River and Squantum plants of the Bethlehem Shipbuilding Company. Agreements were drawn whereby the Emergency Fleet Corporation would pay the cost of the widening of the temporary bridge, changes in Bay State Street Railway car barns, and construction of loop trestle for electric cars. The work was to be done by this Commission in connection with its work of building temporary bridge. These negotiations for changes in the original plans caused further

delay in the completion of the temporary bridge. Contract for steel drawbridge could not be made until the matter of widening was definitely settled. Contract was then made with the Boston Bridge Works to build the draw of the bridge on a cost plus percentage basis. The whole work of building the temporary bridge and widening, steel drawbridge, electric car trestle and changes in car barn was completed so that it could be opened to public traffic on October 28. After the traffic was diverted to the new bridge, the work of removing a portion of the old bridge opposite the new channel and completing the dredging of the new channel was done. As requested by the representatives of the Emergency Fleet Corporation, no interruption whatever was caused to the highway traffic by the changes. A short interruption in navigation occurred, but at practically no inconvenience, as arrangements were made with the two companies who receive the coal which goes about the bridge.

The work of completing the water and gas siphon, which it was necessary to discontinue until the removal of the old bridge, has been resumed and is now in progress. When this work is completed fender piers must be built on the downstream side of the temporary bridge.

A plan has been prepared for the transfer of land to the city of Boston for the widening of Preston Street.

Studies and estimates have been prepared for changes in the design of the permanent Neponset Bridge.

Plans and investigations have been made for information of the Attorney-General in the settlement of land damages near the Savin Hill section.

The filling of embankments of Old Colony Parkway with household ashes and rubbish collected by the Boston Development and Sanitary Company has continued during the year, and considerable progress has been made. A total of about 73,683 cubic yards has been furnished at three locations, one near the junction of Columbia Road, one between Victory Road and Freeport Street near Pope's Hill Station, and one in the Neponset Playground.

Revere Beach Parkway.

In the County Park section between Everett Avenue, Everett, and Washington Avenue, Chelsea, edgestones have been set and concrete sidewalks constructed. The work of setting edgestones was done by contract with Coleman Brothers, and the construction of sidewalks by the forces of the division.

RESERVATIONS.

Charles River Reservation; Lower Basin Section.

Two sections of granite wall along the southerly side of Broad Canal have settled and fallen into the channel, one opposite the property of Raymond E. Smith and the other along property of the city of Cambridge near the Commercial Street Bridge. It was necessary for this Commission, and authority was given, to remove the débris as it caused obstruction to navigation. No work of rebuilding the walls has been done, but unless they are rebuilt the land will slump into the canal. The city of Cambridge has endeavored to protect the balance of its wall from falling by temporary ties.

Plans have been prepared and materials ordered for the construction of a temporary wooden bridge across Bullard's Creek on the southerly side of Charles River between Western Avenue and Cambridge Street. Materials have just been received, and the work of constructing the bridge will be undertaken immediately.

Portions of the granolithic walk along the Embankment between Berkeley Street and Harvard Bridge have been relaid to repair damage caused by settlement.

Small quantities of filling material have been obtained and deposited for the subgrading of the roadways along the southerly bank of the river for the privilege of dumping, at no cost to the Commonwealth. Cinders have been received from the Cambridge Electric Light Company, and gravel material from the Hugh Nawn Contracting Company.

Charles River Reservation, Upper Division.

A section of the retaining wall along Quinobequin Road in Newton Upper Falls which was in a dangerous condition has been rebuilt.

Studies and estimates have been made for changes in swimming pool and pumping equipment so as to locate all pumps at the southerly end of the pool and provide additional circulation pump, also for the rearrangement of the wiring and electrical equipment. Work of making these changes is now in progress.

Preliminary estimates for reconstruction of Arsenal Street and Western Avenue bridges and Western Avenue between these two points have been made.

Lynn Shore Reservation.

Repairs and re-enforcements to the concrete sea wall made necessary by changes in the elevation of the beach were made by the forces of the Revere Beach Division. Appropriation should be made, and is included in the estimate for next year, for further repairs to toe-wall in the vicinity of the Red Rock section.

Middlesex Fells Reservation.

Surveys have been made and plans have been prepared of the land belonging to the Winchester Water Works in Middlesex Fells Reservation.

A section of Woodland Road has been resurfaced with bituminous macadam. The work was done by the forces of the Middlesex Fells Division.

Nantasket Beach Reservation.

A plan has been prepared for the extension of the main sewers in the Reservation, and a portion is at present under construction.

Revere Beach Reservation.

During the year about 23,346 square feet of concrete sidewalk have been laid in the Reservation by the forces of Revere Beach Division. The cost has averaged 12 cents per square

foot. It is very desirable to continue this work from year to year, and amounts have been included in the estimates for next year for such work in this division.

Winthrop Shore Reservation.

Some repairs were made to the sea wall at the northerly end of the Reservation by filling and backing with concrete by means of the cement gun.

Bridges and Locks.

Charles River Dam. — The work necessary for care, maintenance and operation of locks, sluices and drawbridge at Charles River Dam has been done by this department, and necessary repairs to plant and electrical equipment have been made.

The lock-gates have been painted and repaired. This work was delayed until September this year at the request of the shipping interests instead of being done in April as at first intended.

The work of breaking ice in the channels and canals in Charles River Basin was accomplished by chartering a towboat fully equipped for a period of three months, from Dec. 15, 1917, to March 15, 1918. The boat was obtained after considerable difficulty, and the cost of the work was considerably in excess of any previous year The following table shows the costs for the winter seasons since the Basin has been under the care and control of this Commission: —

	Total Cost.
1910–11,	$3,674 21
1911–12,	3,955 41
1912–13,	689 05
1913–14,	4,630 47
1914–15,	1,988 31
1915–16,	3,899 02
1916–17,	6,510 90
1917–18,	11,293 41

Proposals for boat for ice breaking have been asked by advertising and by letter for the coming winter, and none have been received. After personal solicitation two proposals were re-

ceived. If either of these proposals are accepted for chartering boat for three months, the cost of the work will be about $30,000. Proposals have also been received from the same parties to sell boat which they propose to charter, one from the Bay State Dredging and Contracting Company for $45,000, and one from George H. Woolley of the Commercial Towing Company for $75,000.

The small boat lock was opened on June 19 and closed on Sept. 14, 1918. The heating plant was shut down on May 14 and started on Sept. 26, 1918.

Repairs have been made to Wellington, Saugus and Malden River bridges.

A design has been made for changes in operating machinery of the Saugus and Malden River bridges, and the parts for the changes ordered.

Repairs have been made to the concrete walls and gate chambers at Cradock Bridge lock and dam.

The following is a record of the traffic and freights which have passed through the locks and drawbridges during the year: —

CHARLES RIVER DAM AND LOCKS.

Main Lock.

Number of openings,	2,497
Number of vessels,	2,771
Number of small boats,	1,456
Lumber (feet B. M.),	1,965,000
Sand (tons),	69,820
Granite (tons),	2,965
Coal (tons),	285,599
Gravel (tons),	10,315
Oil (gallons),	1,000,000
Oil (barrels),	203,000
Stone, rubble (tons),	900
Piles,	310
Pine, yellow (feet B. M.),	40,000
Miscellaneous (tons),	416

Small Boat Lock.

Number of openings,	138
Number of boats,	189

There were 1,777 drawbridge openings.

WELLINGTON BRIDGE.

Number of openings,	210
Number of vessels,	329

MALDEN RIVER BRIDGE.

Number of openings,	428
Number of vessels,	790

SAUGUS RIVER BRIDGE.

Number of openings,	217
Number of vessels,	294

CRADOCK LOCK.

Number of openings,	312
Number of boats,	382
Number of boats over rollway,	90

TEMPORARY NEPONSET BRIDGE.

Number of openings,	41
Number of vessels,	63

GENERAL.

Surveys and investigations have been made for preparation of reports and estimates.

Engineering services have been furnished for work of repairs and maintenance of roads and other work in parkways and reservations.

Ninety-six permits have been granted for work in the parkways and reservations, and supervision of this work given by this department.

The bridges under the care and control of this Commission have been inspected and report made to the Secretary with recommendations for necessary repairs.

The walks generally in all the divisions are in poor condition. I recommend that a sum be estimated from each division each year for laying permanent concrete walks.

The following tables are appended to this report: —

TABLE 1. — Data relating to Metropolitan Park System.
TABLE 2. — Summary of cost of road repairs and maintenance.

Respectfully submitted,

JOHN R. RABLIN,
Engineer.

DEC. 1, 1918.

TABLE 1. — DATA RELATING TO METROPOLITAN PARK SYSTEM.

Areas of Reservations and Parkways.

	Acres.	
Reservations: —		
Blue Hills,	4,906 43	
Middlesex Fells,	1,898 31	
Stony Brook,	463 72	
Beaver Brook,	58 33	
Hart's Hill,	22 97	
Hemlock Gorge,	23 06	
Charles River,	711 21	
Mystic River,	54 25	
Neponset River,	922 59	
King's Beach and Lynn Shore,	22 69	
Revere Beach,	64 99	
Winthrop Shore,	16 83	
Quincy Shore,	32 91	
Nantasket Beach,	25 59	
Total,	———	9,223 88
Parkways: —		
Hammond Pond,	183 69	
Blue Hills,	83 58	
Old Colony,	55 20	
Woburn,	23 24	
Middlesex Fells,	82 12	
Revere Beach,	126 89	
Mystic Valley,	337 55	
Neponset River,	74 11	
Fresh Pond,	12 40	
Lynn Fells,	7 72	
Furnace Brook,	101 25	
Nahant Beach,	81 98	
Lynnway,	5 15	
Winthrop,	8 04	
Dedham,	35 87	
Alewife Brook,	144 53	
West Roxbury,	72 37	
Quannapowitt,	13 47	
Total,	———	1,449 16
Grand total, reservations and parkways,		10,673 04

Lengths of Formal Roads constructed.

	Double Roadways (Miles).	Single Roadways (Miles).	Total (Miles).
Reservations: —			
Charles River,	–	4.87	
Lynn Shore,	–	.96	
Quincy Shore,	–	2.24	
Revere Beach,	–	2.70	
Stony Brook,	–	2.34	
Winthrop Shore,	–	1.07	
			14.18
Parkways: —			
Alewife Brook,	–	.70	
Blue Hills,	1.46	1.61	
Fresh Pond,	–	.50	
Furnace Brook,	–	3.24	
Lynn Fells,	–	1.05	
Lynnway,	–	.68	
Middlesex Fells,	4.10	1.77	
Mystic Valley,	–	5.50	
Nahant Beach,	–	.50	
Neponset River,	–	.53	
Revere Beach,	1.45	3.73	
Winthrop,	–	.49	
Woburn,	–	1.38	
			21.68
	7.01*		
* Equivalent in miles of single roadway,			14.02

Highways transferred by or taken from cities and towns: —	Miles.	
Alewife Brook Parkway,	.44	
Blue Hills Reservation,	1.23	
Middlesex Fells Reservation,	6.63	
Nantasket Beach Reservation,	.71	
		9.01
Grand total,		58.89

All above roads open to automobile traffic.

Lengths of Carriage Roads in Reservations.

	Miles.
Blue Hills Reservation,	30.93
Middlesex Fells Reservation,	17.62
Stony Brook Reservation,	1.60
Beaver Brook Reservation,	.22
Charles River Reservation,	3.70
Total,	54.07

Of the above roads 10.19 miles are open to automobile traffic.

Lights in Parkways and Reservations.

	Lights.
Alewife Brook Parkway (Welsbach naphtha),	17
Alewife Brook Parkway (arc lights),	6
Blue Hills Parkway (Welsbach gas),	80
Furnace Brook Parkway (Welsbach gas),	86
Middlesex Fells Parkway (Welsbach naphtha),	261
Middlesex Fells Reservation (Welsbach naphtha),	41
Middlesex Fells Reservation (electric),	48
Mystic Valley Parkway (Welsbach naphtha),	160
Lynn Fells Parkway (Welsbach naphtha),	33[1,2]
Nantasket Beach Reservation (electric),	24[1,2]
Winthrop Parkway (Welsbach naphtha),	11
Winthrop Shore Reservation (electric),	7
Nahant Beach Parkway (electric),	7[3]
Lynn Shore Reservation (electric),	28
Lynnway (electric),	17
Charles River Reservation, Upper Division, along the Speedway (Welsbach naphtha),	69[4]
Charles River Reservation, Upper Division, along Nonantum Road (Welsbach gas),	19
Revere Beach Parkway (Welsbach naphtha),	169
Revere Beach Parkway (electric),	1
Revere Beach Parkway (arc),	2
Fresh Pond Parkway (electric),	15
Old Colony Parkway (arc),	3
Quincy Shore Reservation (Welsbach gas),	78
Quincy Shore Reservation (electric),	2
Revere Beach Reservation (Welsbach naphtha),	35
Revere Beach Reservation (Welsbach gas),	53
Revere Beach Reservation (electric),	16[5]
Charles River Reservation, Boston Embankment (electric),	106
Charles River Reservation, Lower Basin, Dam and Lock (electric),	15
Woburn Parkway (Welsbach naphtha),	31
Total,	1,440

[1] Twenty additional lights in summer.
[2] Three additional lights in summer south of bath-house near wall.
[3] Five additional lights in summer.
[4] Three electric lights in yard at administration building.
[5] Three hundred and ninety-five additional lights in summer.

Miles of Seashore.

	Miles.
Lynn Shore,	1.50
Nahant Beach,	3.92
Revere Beach,	2.74
Winthrop Shore,	1.71
Nantasket Beach,	1.02
Quincy Shore,	2.19
Total,	13.08

Lengths of Sea Walls.

	Miles.
Lynn Shore,	1.30
Revere Beach at Northern Circle,	.08
Revere Beach at Eliot Circle,	.15
Revere Beach, shore protection, bath-house shelter to Revere Street shelter,	.29
Revere Beach, shore protection, south of Northern Circle,	.28
Winthrop Shore, bridge to Great Head,	1.04
Winthrop Shore, bridge to Grover's Cliff,	.23
Quincy Shore Reservation, southerly end,	.15
Nantasket Beach Reservation,	.43
Total,	3.95

Miles of River Bank.

	Miles.
Charles River,	28.13
Mystic River,	8.16
Neponset River,	15.86
Alewife Brook,	4.50
Total,	56.65

Bridges.

Reinforced concrete bridges,	11
Steel bridges,	9
Wooden bridges,	4[1]
Drawbridges,	6
Footbridges,	11
Total,	41

Culverts.

Reinforced concrete and other masonry culverts,	32

[1] One-half of Wellington Bridge rebuilt with concrete girders.

Dams.

Beaver Brook Reservation, small wooden dams,	2
Charles River Reservation, Charles River Basin Tidal Dam, 1,200 feet in length,	1
Charles River Reservation, small stone dam in branch below Washington Street, Newton Lower Falls,	1
Charles River Reservation, reinforced concrete dam at Washington Street, Newton Lower Falls, 200 feet in length,	1
Hemlock Gorge Reservation, small reinforced concrete dam on East Branch of river, Newton Upper Falls,	1
Hemlock Gorge Reservation, reinforced concrete dam in Charles River at Boylston Street, Newton Upper Falls, 90 feet in length,	1
Mystic River Reservation, reinforced concrete tidal dam at Cradock Bridge, 100 feet in length; weirs, 400 feet in length,	1
Total,	8

Lock-gates, Sluice-gates and Tide-gates.

Charles River Reservation, Charles River Basin Tidal Dam, 6 lock-gates, 13 sluice-gates, 43 tide-gates.

Mystic River Reservation, Cradock Bridge Tidal Dam, 2 lock-gates, 4 sluice-gates, 8 tide-gates.

Quincy Shore Reservation, 8 tide-gates.

Revere Beach Parkway, 1 tide-gate.

Police Signal System.

	Miles.
Blue Hills Division,	30½
Middlesex Fells Division,	18¼
Nantasket Beach Division,	2½
Charles River Reservation,	10
Fresh Pond Parkway,	½
Total,	61¾

Revere Beach Division Police Signal System, serving 11 miles of parkways and reservations, and Middlesex Fells Division, serving 1½ miles of parkway, on wires leased from the New England Telephone and Telegraph Company. Two miles of wire in Blue Hills Reservation leased from the New England Telephone and Telegraph Company.

Buildings.

	Hammond Pond Parkway.	Blue Hills.	Middlesex Fells.	Revere Beach.	Charles River Reservation.		Nantasket Beach.	Beaver Brook.	Totals.
					Lower Basin.	Upper Division.			
Police stations,	–	1	1	2	–	2	1	–	7
Substations,	1	5	2	3	2	1	1	–	14
Separate work, headquarters,	–	–	1	1	–	–	–	–	2
Stables,	–	5	3	2	1	3	1	1	16
Superintendents' houses,	–	1	–	1	–	2	–	1	5
Dwellings,	–	10	6	–	–	4	2	–	22
Garages,	–	4	1	2	1	1	1	–	10
Carpenter shops,	–	1	1	1	–	1	–	–	4
Paint shops,	–	–	1	1	1	–	1	–	4
Other shops,	–	–	3	2	–	4	1	–	10
Sheds,	–	2	6	3	1	1	–	–	13
Miscellaneous,	–	2	13	3	5	4	5	2	34
Band stands,	–	1	3	3	1	8	1	1	18
Shelters,	–	–	1	4	1	1	1	1	9
Refectories,	–	2	–	–	1	–	1	–	4
Hotel,	–	–	–	–	–	–	1	–	1
Sanitaries,	–	3	6	2	1	4	7	1	24
Boathouses,	–	–	–	1	1	6	–	–	8
Bath-houses,	–	3	2	2	–	3	1	–	11
Laundries,	–	–	–	1	–	–	1	–	2
Coal bin,	–	1	–	–	–	–	1	–	1
									219

TABLE 2. — SUMMARY OF COST OF ROAD REPAIRS AND MAINTENANCE, 1918.

PARKWAY OR RESERVATION.	Length (Feet).	Width of Roadway (Feet).	Square Yards.	Cost per Square Yard in Detail.								Total Amount.	Remarks.	Location.
				Labor (Cents).	Gravel (Cents).	Broken Stone (Cents).	Sand (Cents).	Bituminous Binder or Dust Layer.			Total Cost (Cents).			
								Kind of Material.	Gallons per Square Yard.	Cost (Cents).				
Alewife Brook Parkway,	1,427	40	6,461	46.12	–	51.23	–	Tarine No. 2 (American Tar Company).	2.01	28.17	125.52	$8,109 64	Reconstruction, .	High Street to Mystic Valley Parkway, Somerville.
Blue Hills Parkway, .	7,700	26, 30	22,555	.58	–	.83	–	Tarine No. 1, . .	.09	1.06	2.47	557 93	Surface treatment,	Mattapan Bridge to Canton Avenue (West Roadway), Milton.
Blue Hills Reservation,	9,450	16	16,800	1.07	–	–	–	Tarite (American Tar Company).	.20	2.51	3.58	600 98	Patching, . .	Unquity Road, Milton.
Blue Hills Reservation,	7,593	16	13,511	.39	–	–	–	Asphaltic road oil No. 6 (Standard Oil Company).	.09	1.33	1.72	232 34	Patching and surface treatment.	Border Road, Milton and Randolph.
Blue Hills Reservation,	7,780	16	13,831	.13	–	–	–	Asphaltic road oil No. 6.	.14	2.06	2.19	303 46	Surface treatment,	Administration Road, Milton and Quincy.
Blue Hills Reservation,	5,000	16	8,888	1.34	–	–	–	Asphaltic road oil No. 6.	.11	1.60	2.94	261 55	Surface treatment,	Wampatuck Road, Administration Road to Furnace Brook Parkway, Quincy.
Charles River Reservation.	5,400	26, 36	16,211	.17	–	–	.13	Tarvia B (Barrett Manufacturing Company).	.14	1.94	2.24	362 43	Surface treatment,	North Beacon Street to Watertown Square, Watertown.
Charles River Reservation.	5,500	16	9,778	.56	–	–	.33	Asphaltic road oil No. 4,	.19	2.92	3.81	372 06	Surface treatment,	Norumbega Road, Weston.
Charles River Reservation.	400	60	2,667	13.72	–	6.68	.30	Tarine No. 2, . .	.82	12.04	32.74	873 24	Resurfacing, .	Soldiers Field Road, Brighton.
Charles River Reservation.	9,300	13	13,500	1.74	1.94	–	.24	Asphaltic road oil No. 4,	.21	3.11	7.03	948 74	Patching and surface treatment.	Quinobequin Road, Newton Upper Falls to Newton Lower Falls, Newton.
Furnace Brook Parkway.	8,350	24, 26	23,414	1.50	–	–	–	Tarvia B, . . .	.09	1.41	2.91	682 16	Surface treatment,	Fenno Street to Hancock Street, Quincy.

Furnace Brook Parkway.	7,700	34, 36, 40	31,500	.12	–	–	–	Asphaltic road oil No. 6,	.06	.90	1.02	321 61	Surface treatment,	Adams Street to Bunker Hill Lane, Quincy.
Lynn Shore Reservation,	525	37	2,160	17.27	–	20.28	–	Tarine No. 2, . .	1.85	23.15	60.70	1,311 07	Reconstruction, .	Nahant Street to Wave Street, Lynn.
Middlesex Fells Reservation.	3,300	22	8,471	35.82	–	20.89	–	Standard Binder A (Standard Oil Company).	1.33	21.20	77.91	6,599 56	Reconstruction, .	Pond Street, South Street to Woodland Road, Stoneham.
Mystic Valley Parkway,	2,200	40	9,778	33.86	–	49.03	–	Tarine No. 2, . .	1.84	25.77	108.66	10,625 13	Reconstruction, .	Winthrop Street to Main Street, Medford.
Nantasket Beach Reservation.	3,760	40	16,711	6.19	–	.66	–	Tarvia B, . . .	.36	5.72	12.57	2,100 68	Surface treatment,	Nantasket Avenue, Hull.
Revere Beach Parkway,	710	26	2,051	.98	–	1.85	–	Tarine No. 1, . .	.42	5.18	8.01	164 27	Surface treatment,	Winthrop Avenue to Boston, Revere Beach & Lynn Railroad Bridge, Revere.
Revere Beach Parkway,	360	36	1,450	1.51	–	1.60	–	Tarine No. 1, . .	.51	6.54	9.65	139 82	Surface treatment,	Broadway to 360 feet westerly, Revere.
Revere Beach Parkway,	1,215	26	3,510	25.18	–	30.27	–	Tarine No. 1 and No. 2,	2.65	31.82	87.27	3,063 07	Reconstruction, .	Spring Street to Vine Street (Southerly Roadway), Everett.
Revere Beach Parkway,	450	36	1,965	1.16	–	2.00	–	Tarine No. 1, . .	.40	5.09	8.25	162 11	Surface treatment,	Broadway to Main Street, Everett.
Revere Beach Reservation.	2,115	34, 38	8,061	1.02	–	4.16	2.85	Tarine No. 1, . .	.37	5.23	13.26	1,068 61	Surface treatment,	Revere Street to Oak Island Avenue, and Revere Street from Boulevard to Ocean Avenue, Revere.

FINANCIAL STATEMENT.

Dec. 1, 1917, to Dec. 1, 1918.

Metropolitan Parks Loan Fund,	$9,049,554 95
Receipts added to loan before June 1, 1901,	198,942 81
	$9,248,497 76
Expenditures to Dec. 1, 1917,	9,244,929 13
Balance,	$3,568 63

Metropolitan Parks Loan Fund, Series II.

Metropolitan Parks Loan Fund, Series II,	$6,844,000 00
Receipts added to loan before June 1, 1901,	29,914 16
	$6,873,914 16

Expenditures.

Mystic Valley Parkway: —				
Construction: —				
Contract, A. G. Tomasello,	$16,848 24			
Labor and material,	1,529 61			
		$18,377 85		
Engineering: —				
Services,	$646 02			
Expenses,	2 70			
		648 72		
			$19,026 57	
Winthrop Parkway: —				
Land,			31,350 00	
Old Colony Parkway: —				
Land,		$47,173 16		
Construction: —				
Contract, Boston Development and Sanitary Company,	$5,647 77			
Labor and material,	12 98			
		5,660 75		
Engineering: —				
Services,	$3,242 29			
Expenses,	37 92			
		3,280 21		
Legal,		3,460 00		
Advertising hearing,		22 00		
			59,596 12	
West Street, Braintree: —				
Engineering: —				
Services,		$98 03		
Expenses,		1 00		
			99 03	
Amounts carried forward,			$110,071 72	$6,873,914 16

Amounts brought forward,				$110,071 72	$6,873,914 16
Neponset Bridge: —					
Construction: —					
Contracts: —					
Hugh Nawn Contracting Company,	$29,985 00				
Bay State Dredging Company,	1,257 18				
		$31,242 18			
Labor and materials,	$21,377 34				
Siphon,	8,994 69				
		30,372 03			
			$61,614 21		
Engineering: —					
Pay rolls,		$5,599 91			
Expenses,		256 00			
			5,855 91		
Rental of land,			500 00		
Drawtenders,			324 24		
Consulting engineer,			250 00		
Ice breaking,			100 00		
Miscellaneous,			29 76		
				68,674 12	
				$178,745 84	
Amounts charged to Dec. 1, 1917,				6,141,964 37	
					6,320,710 21
Balance,					$553,203 95

North Beacon Street Bridge Loan.

Chapter 780, Acts of 1914,			$175,000 00
Expenditures.			
Installing cable,	$1,287 26		
Paving,	1,243 73		
Erecting fence,	884 10		
Pay rolls,	102 10		
Supplies,	59 74		
Repairs to fence,	24 00		
Labor,	17 50		
Tickets,	2 85		
		$3,621 28	
Amounts charged to Dec. 1, 1917,		171,232 22	
			174,853 50
Balance,			$146 50

Charles River Basin Loan.

Total amount of loan,			$4,500,000 00
Receipts added to loan,			9,368 91
			$4,509,368 91
Expenditures.			
Shelters,	$1,672 00		
Changes in stable,	146 40		
Rent of land,	1 00		
		$1,819 40	
Amounts charged to Dec. 1, 1917,		4,469,933 63	
			4,471,753 03
Balance,			$37,615 88

Metropolitan Parks System Maintenance.

Appropriation Dec. 1, 1917, to Dec. 1, 1918, ... $523,643 13

Expenditures.

General expense: —				
Police: —				
Pay rolls,	$131,465 78			
Miscellaneous,	11,740 15			
		$143,205 93		
Salaries: —				
Commissioners,	$3,450 00			
General office,	10,016 34			
Engineering department,	8,750 42			
		22,216 76		
Rent, lighting and care of offices,		4,611 63		
Office supplies,		823 34		
Automobile expense,		988 50		
Stationery and printing,		956 95		
Telephones,		695 03		
Engineering supplies,		491 04		
Maps and books,		72 01		
Premium on bond,		30 00		
Traveling,		22 00		
Heater,		19 50		
Door check,		7 28		
Recording papers and certified copies,		6 99		
			$174,146 96	
Blue Hills Reservation: —				
Labor,	$28,809 75			
Teaming,	49 00			
Keep of horses,	5,381 95			
Horses, carriages, automobile, etc.,	5,250 84			
		$39,491 54		
Labor and supplies, gypsy and brown-tail moth work,		40,295 71		
General supplies,		3,476 74		
Watering or its equivalent,		3,241 06		
Stationery and printing,		428 13		
Water rates,		305 60		
Telephones,		280 83		
Repairs,		251 48		
Lighting buildings,		121 77		
Erecting fence,		101 14		
Express and freight,		49 51		
Stamps,		35 00		
Blankets, etc.,		25 00		
Plumber's furnace,		15 40		
			88,118 91	
Middlesex Fells Reservation: —				
Labor,	$24,817 50			
Teaming,	1,460 63			
Keep of horses,	2,459 35			
Horses, carriages, automobiles, etc.,	1,333 50			
		$30,070 98		
Labor and supplies, gypsy and brown-tail moth work,		27,895 82		
Watering or its equivalent,		5,925 80		
General supplies,		2,730 95		
Stationery and printing,		440 92		
Telephones,		342 76		
Lighting buildings,		272 41		
Amounts carried forward,		$67,679 64	$262,265 87	$523,643 13

Amounts brought forward,		$67,679 64	$262,265 87	$523,643 13
Repairs,		58 47		
Water rates,		49 75		
Express and freight,		49 24		
Postage,		41 85		
Traveling,		11 82		
Notary fee,		25		
			67,891 02	
Revere Beach Reservation: —				
Labor,	$23,480 87			
Teaming,	26 00			
Keep of horses,	1,414 27			
Horses, carriages, automobiles, etc.,	3,175 84			
		$28,096 98		
Street lighting,		5,045 17		
General supplies,		3,724 50		
Watering or its equivalent,		1,241 88		
Telephones,		540 53		
Lighting buildings,		504 17		
Repairs,		426 92		
Water rates,		283 17		
Stationery and printing,		265 27		
Postage,		44 39		
Heater,		37 90		
Express and freight,		37 44		
Traveling,		34 60		
Clock,		25 00		
Boiler inspection,		5 00		
			40,312 92	
Stony Brook Reservation: —				
Labor,	$3,724 38			
Teaming,	105 00			
Keep of horses,	86 00			
Horses, carriages, automobiles, etc.,	473 42			
		$4,388 80		
Labor and supplies, gypsy and brown-tail moth work,		4,694 27		
General supplies,		638 04		
Watering or its equivalent,		125 00		
Telephones,		36 60		
Water rates,		12 00		
Repairs,		8 95		
			9,903 66	
Beaver Brook Reservation: —				
Labor,	$952 98			
Keep of horses,	268 50			
Horses, carriages, automobiles, etc.,	493 97			
		$1,715 45		
Labor and supplies, gypsy and brown-tail moth work,		525 49		
General supplies,		243 98		
Water rates,		68 95		
Telephones,		50 88		
Lighting buildings,		12 00		
Stationery and printing,		9 69		
Repairs,		3 20		
Express,		2 54		
			2,632 18	
Charles River, Upper Division: —				
Labor,	$17,969 83			
Teaming,	929 50			
Keep of horses,	1,533 68			
Horses, carriages, automobiles, etc.,	2,727 68			
		$23,160 69		
Amounts carried forward,		$23,160 69	$383,005 65	$523,643 13

Amounts brought forward,		$23,160 69	$383,005 65	$523,643 13
Labor and supplies, gypsy and brown-tail moth work,		9,676 48		
General supplies,		3,908 23		
Street lighting,		3,093 91		
Watering or its equivalent,		3,037 82		
Telephones,		363 85		
Engine (motor-boat),		212 50		
Lighting buildings,		205 80		
Stationery and printing,		151 44		
Water rates,		144 60		
Repairs,		86 56		
Cork ring buoys,		70 10		
Physicians' services,		67 00		
Use of engine,		55 55		
Postage,		28 50		
Traveling,		23 98		
Express,		18 25		
			44,305 26	
Riverside Recreation Grounds: —				
Labor,	$2,680 32			
Teaming,	400 00			
Horses, carriages, automobiles, etc.,	130 36			
		$3,210 68		
General supplies,		2,161 45		
Lighting buildings,		138 75		
Water rates,		104 83		
Telephones,		90 88		
Rental of sewer,		162 90		
Electric power,		74 40		
Repairs,		60 35		
Mowers,		31 75		
Rent of pile driver,		6 00		
Express,		3 58		
Postage,		1 00		
Stationery and printing,		85		
			6,047 42	
Neponset River Reservation: —				
Labor,		$250 14		
Labor and supplies, gypsy and brown-tail moth work,		2,204 01		
General supplies,		93 00		
Telephones,		46 26		
Stationery and printing,		20 99		
			2,614 40	
Mystic River Reservation: —				
Labor,	$9,017 52			
Teaming,	2,108 50			
		$11,126 02		
Labor and supplies, gypsy and brown-tail moth work,		854 51		
Repairs,		470 77		
General supplies,		302 73		
Electric power,		250 00		
Telephones,		49 93		
Street lighting,		35 70		
Oil heater,		18 28		
Stationery and printing,		13 32		
Water rates,		8 23		
Postage,		2 00		
Express,		1 24		
			13,132 73	
Amounts carried forward,			$449,105 46	$523,643 13

Amounts brought forward,			$449,105 46	$523,643 13
Lynn Shore Reservation: —				
Labor,	$6,837 70			
Keep of horses,	261 00			
Horses, carriages, etc.,	51 00			
		$7,149 70		
Street lighting,		2,166 00		
Watering or its equivalent,		1,513 08		
General supplies,		937 23		
Water rates,		35 00		
Buoys,		8 70		
			11,809 71	
Quincy Shore Reservation: —				
Labor,	$4,141 22			
Teaming,	785 00			
		$4,926 22		
Street lighting,		2,132 46		
General supplies,		856 01		
Labor and supplies, gypsy and brown-tail moth work,		214 17		
Watering or its equivalent,		125 00		
Telephones,		47 23		
Repairs,		28 70		
Furniture,		28 20		
Lighting buildings,		18 32		
			8,373 31	
Winthrop Shore Reservation: —				
Labor,		$2,363 05		
Street lighting,		667 29		
General supplies,		665 76		
Watering or its equivalent,		92 81		
Water rates,		17 14		
Stove pipe,		3 00		
			3,809 05	
				473,100 53
Balance,				$50,542 60

Special Appropriations.

Pensions.

Appropriation,		$6,133 84
Expenditures.		
Elder pension,	$842 37	
Kenney pension,	667 43	
Lord pension,	667 43	
Haddock pension,	638 75	
Stewart pension,	600 00	
Finn pension,	593 12	
Armstrong pension,	486 40	
Powers pension,	400 00	
Woodworth allowance,	365 00	
Mateer pension,	300 00	
Carter pension,	288 48	
		5,848 98
Balance,		$284 86

Band Concerts.

Appropriation,			$25,000 00
EXPENDITURES.			
Blue Hills Division: —			
Bands,	$1,382 07		
Extra police,	1 50		
		$1,383 57	
Middlesex Fells Division: —			
Bands,	$3,666 48		
Extra police,	152 72		
Painting signs,	45 30		
Labor,	22 13		
		3,886 63	
Revere Beach Reservation: —			
Bands,	$7,488 00		
Lighting,	67 80		
Chairs,	33 00		
Extra police,	24 50		
		7,613 30	
Charles River, Upper Division: —			
Bands,	$2,624 42		
Extra police,	8 00		
		2,632 42	
Charles River, Lower Basin: —			
Bands,	$569 88		
Extra police,	120 82		
Chairs,	33 00		
Lighting,	11 12		
		734 82	
Nahant Beach Parkway: —			
Bands,	$1,743 10		
Lighting,	5 06		
		1,748 16	
Nantasket Beach Reservation: —			
Bands,	$6,949 80		
		6,949 80	
General office: —			
Printing schedules,	$22 06		
		22 06	
			24,970 76
Balance,			$29 24

Blue Hills Reservation, Extermination of Moths.

Appropriation,		$43,000 00
EXPENDITURES.		
Pay rolls,	$30,240 84	
Arsenate of lead,	7,454 71	
Supplies,	1,401 14	
Water,	7 68	
	$39,104 37	
Expended to Dec. 1, 1917,	3,895 09	
		42,999 46
Balance,		$0 54

Wharves and Walls, Broad and Lechmere Canals.

Appropriation,			$1,000 00
EXPENDITURES.			
Engineering, services,	$165 21		
Engineering, expenses,	1 76		
		$166 97	
Report of hearing,		24 25	
Advertising,		5 20	
		$196 42	
Expended to Dec. 1, 1917,		224 08	
			420 50
Balance,			$579 50

Apportionment Commission.

Appropriation,			$10,800 00
EXPENDITURES.			
Advertising,		$108 68	
			108 68
Balance,			$10,691 32

Bridges over Charles River.

Appropriation,			$1,000 00
EXPENDITURES.			
Advertising,		$17 41	
Pay rolls,		12 72	
		$30 13	
Expended to Dec. 1, 1917,		968 63	
			998 76
Balance,			$1 24

METROPOLITAN PARKS, BOULEVARD MAINTENANCE.

Appropriation Dec. 1, 1917, to Dec. 1, 1918,				$346,771 80
EXPENDITURES.				
General expense: —				
Police: —				
Pay rolls,	$42,963 32			
Miscellaneous,	12,278 13			
		$55,241 45		
Salaries: —				
Commissioners,	$3,450 00			
General office,	10,662 79			
Engineering department,	8,090 00			
		22,202 79		
Amounts carried forward,		$77,444 24		$346,771 80

Amounts brought forward,		$77,444 24		$346,771 80
Rent, lighting and care of offices,		4,132 02		
Telephones,		1,136 87		
Stationery and printing,		872 31		
Engineering supplies,		852 12		
Office supplies,		626 31		
Automobile expense,		553 77		
Accountant,		248 50		
Maps and books,		120 85		
Hearings,		42 10		
			$86,029 09	
Blue Hills Parkway: —				
Labor,	$3,835 64			
Teaming,	32 00			
Horses, carriages, automobiles, etc.,	1,060 00			
		$4,927 64		
Street lighting,		2,071 33		
Watering or its equivalent,		821 75		
General supplies,		652 03		
Labor and supplies, gypsy and brown-tail moth work,		519 69		
Water rates,		25 67		
Lighting buildings,		8 25		
Repairs,		6 10		
Telephones,		3 00		
			9,035 46	
Middlesex Fells Parkway: —				
Labor,	$12,039 14			
Teaming,	2,769 95			
Keep of horses,	25 83			
Horses, carriages, automobiles, etc.,	958 22			
		$15,793 14		
Street lighting,		10,725 09		
Watering or its equivalent,		10,386 87		
General supplies,		3,401 00		
Labor and supplies, gypsy and brown-tail moth work,		469 44		
Telephones,		76 75		
Water rates,		22 29		
Lighting buildings,		10 70		
Repairs,		4 32		
Postage,		2 00		
Freight,		1 30		
			40,892 90	
Mystic Valley Parkway: —				
Labor,	$10,573 81			
Teaming,	2,746 50			
Horses, carriages, automobiles, etc.,	1,017 75			
		$14,338 06		
Watering or its equivalent,		14,398 64		
Street lighting,		7,680 04		
General supplies,		2,511 39		
Labor and supplies, gypsy and brown-tail moth work,		1,309 43		
Repairs,		169 20		
Telephones,		83 34		
Water rates,		17 31		
			40,507 41	
Revere Beach Parkway: —				
Labor,	$17,140 84			
Teaming,	44 75			
Keep of horses,	100 25			
Horses, carriages, automobiles, etc.,	3,094 30			
		$20,380 14		
Amounts carried forward,		$20,380 14	$176,464 86	$346,771 80

Amounts brought forward,		$20,380 14	$176,464 86	$346,771 80
Street lighting,		8,490 39		
Watering or its equivalent,		6,032 77		
General supplies,		4,662 62		
Labor and supplies, gypsy and brown-tail moth work,		639 48		
Power for draw,		307 50		
Repairs,		156 58		
Water rates,		27 92		
Stationery and printing,		27 71		
Freight,		10 65		
Postage,		3 50		
			40,739 26	
Neponset River Parkway: —				
Labor,		$918 50		
Labor and supplies, gypsy and brown-tail moth work,		209 42		
General supplies,		129 87		
Stationery and printing,		3 10		
			1,260 89	
Nahant Beach Parkway: —				
Labor,	$3,939 21			
Keep of horses,	389 61			
		$4,328 82		
Street lighting,		869 16		
Watering or its equivalent,		699 32		
General supplies,		88 19		
Express,		25		
			5,985 74	
Fresh Pond Parkway: —				
Labor,	$892 57			
Horses, carriages, automobiles, etc.,	267 56			
		$1,160 13		
Street lighting,		353 21		
Labor and supplies, gypsy and brown-tail moth work,		231 47		
General supplies,		200 00		
			1,944 81	
Furnace Brook Parkway: —				
Labor,	$3,350 75			
Teaming,	20 00			
Horses, carriages, automobiles, etc.,	1,200 00			
		$4,570 75		
Street lighting,		2,156 10		
Watering or its equivalent,		1,082 28		
Labor and supplies, gypsy and brown-tail moth work,		846 75		
Plans, specifications, etc.,		200 00		
General supplies,		58 72		
Stationery and printing,		16 00		
Lighting buildings,		13 88		
			8,944 48	
Winthrop Parkway: —				
Labor,		$61 05		
Street lighting,		511 95		
Watering or its equivalent,		9 75		
Advertising,		6 00		
			588 75	
Lynnway: —				
Labor,		$5,978 20		
Power for lighting and operating draw,		461 94		
General supplies,		331 37		
Repairs,		316 88		
Street lighting,		227 50		
Traveling,		20 45		
Stationery and printing,		7 88		
Amounts carried forward,		$7,344 22	$235,928 79	$346,771 80

Amounts brought forward,		$7,344 22	$235,928 79	$346,771 80
Watering or its equivalent,		4 65		
Postage,		3 50		
Water rates,		1 76		
			7,354 13	
Lynn Fells Parkway: —				
Labor,	$2,256 63			
Teaming,	318 50			
Horses, carriages, automobiles, etc.,	48 20			
		$2,623 33		
Street lighting,		2,069 07		
Watering or its equivalent,		568 68		
General supplies,		341 09		
			5,602 17	
Middlesex Fells Roads: —				
Labor,	$2,299 55			
Teaming,	297 00			
Horses, carriages, automobiles, etc.,	2 11			
		$2,598 66		
Watering or its equivalent,		14,403 34		
Street lighting,		2,195 96		
General supplies,		198 81		
			19,396 77	
Alewife Brook Parkway: —				
Labor,	$9,251 22			
Teaming,	1,846 25			
Horses, carriages, automobiles, etc.,	52 01			
		$11,149 48		
Watering or its equivalent,		9,326 50		
General supplies,		2,249 48		
Street lighting,		1,331 20		
Labor and supplies, gypsy and brown-tail moth work,		205 28		
Water rates,		12 12		
Landscape architect,		5 07		
Stationery and printing,		3 78		
			24,282 91	
Woburn Parkway: —				
Labor,	$2,327 76			
Teaming,	393 25			
Keep of horses,	12 75			
Horses, carriages, automobiles, etc.,	694 84			
		$3,428 60		
Street lighting,		1,435 57		
General supplies,		926 05		
Watering or its equivalent,		293 77		
Labor and supplies, gypsy and brown-tail moth work,		211 17		
Water rates,		11 50		
			6,306 66	
West Roxbury Parkway: —				
Labor and supplies, gypsy and brown-tail moth work,		$364 76		
			364 76	
Hammond Pond Parkway: —				
Labor,	$513 20			
Teaming,	21 00			
Keep of horses,	33 60			
Horses, carriages, automobiles, etc.,	85 00			
		$652 80		
Labor and supplies, gypsy and brown-tail moth work,		870 69		
			1,523 49	
				300,759 68
Balance,				$46,012 12

Charles River Basin Maintenance.

Maintenance of Parks and Water Areas.

Appropriation,			$97,542 80
Expenditures.			
Labor,	$26,311 12		
Teaming,	176 00		
Keep of horses,	883 45		
Horses, carriages, automobiles, etc.,	1,744 22		
		$29,114 79	
Police: —			
Pay rolls,	$39,323 56		
Miscellaneous,	2,607 16		
		41,930 72	
General supplies,		4,632 26	
Street lighting,		3,647 29	
Lighting buildings,		939 99	
Watering or its equivalent,		880 29	
Water rates,		624 32	
Telephones,		281 83	
Repairs,		276 34	
Stationery and printing,		228 53	
Landscape architect,		60 00	
Fire extinguisher,		23 63	
Boat cover,		18 75	
Traffic signs,		13 00	
Clock,		8 00	
Postage,		5 00	
Express,		2 83	
			82,687 57
Balance,			$14,855 23

Maintenance and Operation of Locks, Gates and Drawbridges.

Appropriation,		$69,572 04
Expenditures.		
Labor, pay rolls,	$39,891 26	
Ice breaking,	11,293 41	
Coal,	4,502 53	
Repairs,	3,331 32	
General supplies,	1,587 44	
Electric power,	1,312 71	
Lighting lock-gate houses and sluices,	557 39	
Heating,	332 81	
Telephones,	279 83	
Automobile expense,	152 84	
Stationery and printing,	61 53	
Removing obstruction,	50 00	
Oil heaters,	30 30	
Boiler inspection,	10 00	
Water rates,	5 00	
Miscellaneous,	10 37	
		63,408 74
Balance,		$6,163 30

Nantasket Beach Maintenance.

Appropriation,			$48,261 65
Expenditures.			
Labor,	$13,938 53		
Keep of horses,	680 69		
Horses, carriages, automobiles, etc.,	526 41		
		$15,145 63	
Police: —			
Pay rolls,	$15,160 08		
Miscellaneous,	3,645 77		
		18,805 85	
Watering or its equivalent,		5,601 61	
General supplies,		2,315 89	
Street lighting,		1,438 48	
Water rates,		557 26	
Rent,		390 00	
Telephones,		167 60	
Stationery and printing,		136 36	
Express,		49 16	
Postage,		44 82	
Traveling,		13 84	
Repairs,		3 10	
			44,669 60
Balance,			$3,592 05

Wellington Bridge Maintenance.

Appropriation,		$12,536 27
Expenditures.		
Labor,	$9,867 45	
Street lighting,	1,485 20	
General supplies,	254 53	
Repairs,	174 72	
Telephones,	76 39	
Stationery and printing,	6 88	
Postage,	2 50	
		11,867 67
Balance,		$668 60

Metropolitan Parks Expense Fund.

Receipts, Dec. 1, 1917, to Dec. 1, 1918.

Bath-houses: —		
Revere Beach, sale of bath tickets,	$35,259 95	
Nantasket Beach, sale of bath tickets,	15,452 85	
Nahant Beach, sale of bath tickets,	8,675 10	
Blue Hills, sale of bath tickets,	237 10	
		$59,625 00
Rentals: —		
Buildings,	$17,985 00	
Lunch stands and refectories,	2,119 11	
Roller-coaster and merry-go-round,	2,100 00	
Street-railway location,	1,355 11	
Land,	1,291 83	
Amounts carried forward,	$24,851 05	$59,625 00

Amounts brought forward,	$24,851 05	$59,625 00
Rentals — *Con.*		
Houses,	1,098 39	
Telephone ducts,	687 99	
Boats,	629 75	
Photographic stands,	125 00	
Boathouse sites,	580 00	
Day rental, Riverside Recreation Grounds,	556 00	
Gas main location,	100 00	
Automobile stands,	75 00	
		28,703 18
Sales: —		
Wood,	$9,727 09	
Vegetables,	791 26	
Land,	619 75	
Grass,	375 00	
Old metal, rubber, lumber, rags, etc.,	242 88	
Coal,	241 50	
Buildings,	234 00	
Posts and planks,	182 80	
Sanitary napkins,	139 63	
Barrels,	114 25	
Hay,	91 75	
Railroad tickets,	59 88	
Articles found on reservation,	41 31	
Plans and photographs,	9 84	
Shrubs,	1 86	
Miscellaneous,	48 88	
		12,921 68
Court fines,		5,047 00
Steamer chair privilege,		4,550 00
Interest on investment,		3,775 94
Sidewalk and entrance construction,		1,106 83
Permit to Boston Elevated Railway,		1,000 00
Piles,		640 00
Payment for damage to property,		441 96
Bags returned,		220 89
Electric light and water furnished,		164 18
Pay closets,		153 18
Jack hammer,		150 00
Waste paper,		141 13
Removal of garbage,		140 00
Contribution to cost of repairs,		131 56
Board of horses,		60 64
Telephone tolls,		55 64
Money found on reservation,		43 78
Burro privilege,		35 00
Typewriter,		30 00
Shortage in delivery,		25 43
Balance due for freight,		21 93
Gravel,		21 50
Newspaper license,		10 00
Field office privilege,		8 00
Payment for lost equipment,		2 69
Checking privilege,		2 60
Discount on lamps,		77 51
		$119,307 25
Balance Dec. 1, 1917,		113,773 94
		$233,081 19

Expenditures Dec. 1, 1917, to Dec. 1, 1918.

General expense: —			
Repairing Lynn Shore sea wall,		$2,538 34	
Uniforms,		300 00	
Repairs to substation, Middlesex Fells Parkway,		250 00	
			$3,088 34
Police: —			
Horses,		$1,050 00	
Uniforms,		429 68	
Lockers,		299 20	
Repairs to substation, Middlesex Fells Parkway,		250 00	
Electric gong,		10 00	
Professional service,		5 00	
			2,043 88
Engineering: —			
Typewriter (part),		$30 00	
Telephone,		12 10	
			42 10
Blue Hills Reservation: —			
Trucking piles,		$160 00	
Board of horses,		20 57	
Flags,		14 86	
Towels,		11 64	
Repairing fire extinguisher,		6 81	
Labor,		3 00	
Zinc,		2 52	
Bath-house tickets,		76	
Cement,		35	
			220 51
Middlesex Fells Reservation: —			
Farm account,		$361 40	
Repairs to substation, Middlesex Fells Parkway,		230 00	
Repairs,		23 60	
Flags,		22 29	
			637 29
Revere Beach Reservation: —			
Bath-house: —			
Pay rolls,	$23,936 46		
Coal,	2,486 13		
Bathing suits,	2,152 47		
Repairs,	1,388 45		
Towels,	939 45		
Engine room,	929 23		
Lumber, etc.,	887 90		
Lighting,	754 13		
Stockings,	725 00		
Soap,	413 23		
Stationery,	320 59		
Bathing caps,	269 10		
Hardware,	234 05		
Paint,	215 76		
Neck rings,	180 00		
Water rates,	159 20		
Findings,	133 02		
Ice,	112 46		
Ash cans,	97 50		
Telephones,	87 47		
Hose,	76 00		
Brooms,	45 43		
Amounts carried forward,	$36,543 03		$6,032 12

Amounts brought forward,	$36,543 03		$6,032 12
Bath-house — *Con.*			
Drilling,	43 88		
Dory,	43 00		
Tickets, etc.,	41 18		
Basket,	37 50		
Elastigum,	37 08		
Material for flags,	26 10		
Medicines and attendance,	21 00		
Cellar drainer,	18 28		
Sanitary napkins,	18 16		
Chairs,	17 25		
Soap-powder,	13 81		
Laundry supplies,	12 81		
Uniform,	12 00		
Pails,	11 50		
Gauze,	9 21		
Mop wringers,	7 50		
Badges,	7 33		
Glasses,	6 50		
Rolls for wringers,	6 50		
Brass checks,	4 68		
Matches,	2 30		
Brush,	1 57		
Combs,	1 08		
Suiting,	87		
Express,	75		
		$36,944 87	
Labor,		564 68	
Waterproofing boiler house,		464 67	
Broken stone,		49 80	
Entrance construction,		113 24	
Sand,		28 50	
New wall, Sagamore Street,		28 00	
Advertising,		22 00	
			38,215 76
Stony Brook Reservation: —			
Installing pipe,		$180 00	
Water rates,		23 80	
Labor,		7 50	
Repairs,		1 10	
Grate,		1 00	
			213 40
Charles River, Upper Division: —			
Repairs,		$109 07	
Flags and pennants,		57 58	
Water rates,		42 60	
Landscape architect,		25 00	
Engineering: —			
Services,	$18 17		
Expenses,	1 12		
		19 29	
Signs,		11 90	
Refreshment stand,		5 20	
			270 64
Cradock Bridge: —			
Telephone tolls,		$0 50	
			50
Lynn Shore Reservation: —			
Repairs to sea wall,		$2,295 04	
			2,295 04
Amount carried forward,			$47,027 46

Amount brought forward,			$47,027 46
Quincy Shore Reservation: —			
Addition to sanitary building,		$402 94	
Landscape architect, services,		35 58	
			438 52
Charles River, Lower Basin: —			
Relaying walks,		$1,300 00	
Repairs,		291 10	
Refund,		100 00	
Test borings,		50 40	
Bridge over Ballard's Creek,		35 93	
Flags,		29 72	
Uniforms,		12 00	
			1,819 85
Middlesex Fells Parkway: —			
Removal of buildings,		$2,200 00	
Entrance construction,		125 52	
Telephone tolls,		4 70	
			2,330 22
Mystic Valley Parkway: —			
Entrance construction,		$40 00	
Appraising land,		15 00	
			55 00
Revere Beach Parkway: —			
Entrance construction,		$82 32	
			82 32
Furnace Brook Parkway: —			
Landscape architect, services,		$95 43	
Entrance construction,		1 73	
			97 16
Alewife Brook Parkway: —			
Iron fence,		$1,089 12	
Repairs to roadway,		929 28	
Landscape architect,		35 26	
			2,053 66
Old Colony Parkway: —			
Freight,		$21 93	
			21 93
Woburn Parkway: —			
Entrance construction,		$40 00	
			40 00
New stores fund: —			
Repairs and grading,		$358 18	
			358 18
Nantasket Beach Reservation: —			
Bath-house: —			
Pay rolls,	$10,568 65		
Bathing suits,	3,061 60		
Repairs,	1,420 77		
Coal,	1,300 11		
Towels,	1,026 90		
Water rates,	447 15		
Stockings,	261 00		
Amounts carried forward,	$18,086 18		$54,324 30

Amounts brought forward,	$18,086 18		$54,324 30
Bath-house — *Con.*			
Engine room,	218 88		
Toilet paper,	160 00		
Stationery,	131 21		
Hardware,	91 32		
Ice,	87 15		
Bathing caps,	82 80		
Lighting,	75 08		
Soap,	62 01		
Medicines and attendance,	59 39		
Paint,	58 05		
Duck suits,	52 50		
Telephones,	42 21		
Bathing checks,	40 00		
Hose,	39 94		
Duck,	30 85		
Brooms,	26 25		
Baskets,	25 00		
Tickets, etc.,	20 75		
Uniform, manager,	12 50		
Sand glasses,	10 00		
Badges,	6 42		
Gasoline cans,	4 01		
Scrub brushes,	3 77		
Coat,	3 25		
Findings,	2 60		
		$19,432 12	
Repairs to buildings,		8,352 65	
Labor,		996 61	
Coal,		939 00	
Steam mains: —			
Barber contract,	$548 20		
Engineer,	152 05		
		700 25	
Painting buildings,		98 60	
Architect, services,		25 00	
			30,544 23
Nahant Beach Parkway: —			
Bath-house: —			
Pay rolls,	$5,182 88		
Bathing suits,	1,622 53		
Towels,	506 34		
Coal,	388 01		
Stockings,	290 50		
Repairs,	223 02		
Lighting,	222 66		
Stationery,	163 84		
Water rates,	113 87		
Lumber,	113 13		
Neck rings,	90 00		
Bathing caps,	89 70		
Paint,	75 92		
Telephones,	71 86		
Uniform,	38 38		
Hardware,	31 80		
Tickets, etc.,	25 27		
Findings,	8 40		
Oil,	5 50		
Combs and brushes,	5 50		
Amounts carried forward,	$9,269 11		$84,868 53

Amounts brought forward,	$9,269 11		$84,868 53	
Bath-house — *Con.*				
Laundry,	4 56			
Postage,	4 50			
Gauze,	4 50			
Engine room,	3 56			
Rolls for wringers,	3 50			
Medicines and attendance,	2 70			
Soda,	1 27			
		$9,293 70		
Repairs to sea wall,		267 35		
Playgrounds,		142 50		
Advertising,		5 25		
			9,708 80	
				$94,577 33
Balance Dec. 1, 1918,				$138,503 86

Metropolitan Parks Trust Fund.

Balance Dec. 1, 1918,	$1,998 03

Summary of General Expense for Year ending Nov. 30, 1918.

	Parks System Maintenance.	Parks Boulevard Maintenance.	Parks Expense Fund.	Parks Loan Fund.	Parks Loan Fund, Series II.	Totals.
Commissioners,	$3,450 00	$3,450 00	–	–	–	$6,900 00
Office salaries,	10,016 34	10,652 79	–	–	–	20,669 13
Engineering,	8,750 42	8,090 00	$42 10	–	–	16,882 52
Police,	143,205 93	55,241 45	2,593 88	–	–	201,041 26
Rent and care, Boston office,	4,538 35	4,000 02	–	–	–	8,538 37
Lighting, Boston office,	73 28	132 00	–	–	–	205 28
Miscellaneous,	4,112 64	4,462 83	–	–	–	8,575 47
Totals,	$174,146 96	$86,029 09	$2,635 98	–	–	$262,812 03

Summary of Expenditures for Year ending Nov. 30, 1918.

	Metropolitan Parks Loan Fund.	Metropolitan Parks Loan Fund, Series II.	Metropolitan Parks System Maintenance.	Metropolitan Parks Boulevard Maintenance.	Metropolitan Parks Expense Fund.	Special Appropriations, Repairs, Construction and Investigations.	Band Concerts.	Totals.
Reservations: —								
Blue Hills,	–	–	$88,118 91	–	$220 51	$39,104 37	$1,383 57	$128,827 36
Beaver Brook,	–	–	2,632 18	–	–	–	220 00	2,852 18
Charles River, Upper Division,	–	–	44,305 26	–	270 64	30 13	1,588 00	46,194 03
Lynn Shore,	–	–	11,809 71	–	4,833 38	–	–	16,643 09
Middlesex Fells,	–	–	67,891 02	–	637 29	–	3,886 63	72,414 94
Mystic River,	–	–	13,132 73	–	50	–	–	13,133 23
Neponset River,	–	–	2,614 40	–	–	–	–	2,614 40
Quincy Shore,	–	–	8,376 31	–	438 52	–	–	8,814 83
Revere Beach,	–	–	40,312 92	–	38,215 76	–	7,613 30	86,141 98
Riverside Recreation Grounds,	–	–	6,047 42	–	–	–	824 42	6,871 84
Stony Brook,	–	–	9,903 66	–	213 40	–	–	10,117 06
Winthrop Shore,	–	–	3,809 05	–	–	–	–	3,809 05
Weston Bridge,	–	–	–	–	–	–	–	–
General expense,	–	–	174,146 96	–	–	–	22 06	174,169 02
Totals,	–	–	$473,100 53	–	$44,830 00	$39,134 50	$15,537 98	$572,603 01

Parkways: —								
Alewife Brook,	–	–	–	$24,282 91	$2,053 66	–	–	$26,335 57
Blue Hills,	–	–	–	9,035 46	–	–	–	9,035 46
Dedham,	–	–	–	–	–	–	–	–
Fresh Pond,	–	–	–	1,944 81	–	–	–	1,944 81
Furnace Brook,	–	–	–	8,944 48	97 16	–	–	9,041 64
Hammond Pond,	–	–	–	1,523 49	–	–	–	1,523 49
Lynn Fells,	–	–	–	5,602 17	–	–	–	5,602 17
Lynnway,	–	–	–	7,354 13	–	–	–	7,354 13
Middlesex Fells,	–	–	–	40,892 90	2,330 22	–	–	43,223 12
Middlesex Fells Roads,	–	–	–	19,396 77	–	–	–	19,396 77
Mystic Valley,	–	$19,026 57	–	40,507 41	55 00	–	–	59,588 98
Nahant Beach,	–	–	–	5,985 74	9,708 80	–	$1,748 16	17,442 70
Neponset River,	–	–	–	1,260 89	–	–	–	1,260 89
Old Colony,	–	59,596 12	–	–	21 93	–	–	59,618 05
Quannapowitt,	–	–	–	–	–	–	–	–
Revere Beach,	–	–	–	40,739 26	82 32	–	–	40,821 58
West Street, Braintree,	–	99 03	–	–	–	–	–	99 03
West Roxbury,	–	–	–	364 76	–	–	–	364 76
Winthrop,	–	31,350 00	–	588 75	–	–	–	31,938 75

Summary of Expenditures for Year ending Nov. 30, 1918 — Concluded.

	Metropolitan Parks Loan Fund.	Metropolitan Parks Loan Fund, Series II.	Metropolitan Parks System Maintenance.	Metropolitan Parks Boulevard Maintenance.	Metropolitan Parks Expense Fund.	Special Appropriations, Repairs, Construction and Investigations.	Band Concerts.	Totals.
Parkways — *Con.*								
Woburn,	–	–	–	$6,306 66	$40 00	–	–	$6,346 66
Neponset Bridge,	–	$68,674 12	–	–	–	–	–	68,674 12
General expenses,	–	–	–	86,029 09	2,635 98	–	–	88,665 07
Totals,	–	$178,745 84	–	$300,759 68	$17,025 07	–	$1,748 16	$498,278 75
Nantasket Beach Reservation,	–	–	–	–	30,902 41	$44,669 60	6,949 80	82,521 81
Wellington Bridge,	–	–	–	–	–	11,867 67[1]	–	11,867 67
Charles River Basin,	–	–	–	–	1,819 85	1,819 40[2] 196 42 146,096 31[1]	734 82	150,666 80
North Beacon Street Bridge Loan,	–	–	–	–	–	3,621 28	–	3,621 28
Grand totals,	–	$178,745 84	$473,100 53	$300,759 68	$94,577 33	$247,405 18	$24,970 76	$1,319,559 32

[1] Maintenance. [2] Loan.